

# AUTHOR INDEX

(Names appearing in capital letters indicate authors of chapters in this volume.)

## A

- Aaberg, H., 284  
 Abbott, N. J., 85  
 Abdel-Hamid, F. M., 515  
 Abdo, K. M., 514, 515, 524  
 Abdul-Ghani, A.-S., 171, 189  
 Abe, H., 302  
 Abe, K., 482  
 Abe, M., 536  
 Abe, Y., 271  
 Abel, J. J., 3  
 Åblad, B., 10  
 ABOU-DONIA, M. B., 511-48;  
 512-18, 520, 521, 524, 528,  
 531-33  
 Abraham, W. C., 341, 345  
 Abramow, M., 273, 276  
 Abu-El-Haj, S., 523, 528, 531,  
 532  
 Abu-Fadil, S., 311  
 Abuzzahab, F. S., 336  
 Ackerman, G. L., 273  
 Adam, A., 337  
 Adamik, R., 70  
 Adams, J. C., 185, 189, 190  
 Adams, R. N., 315  
 Ader, R., 336  
 Adler, K. B., 151  
 Adrien, J., 366  
 Advia, J. P., 296, 306, 307,  
 310, 313-15  
 Aehnelt, C., 298  
 Aellig, W. H., 466  
 Aghajanian, G. K., 360, 373,  
 466-68  
 Agid, Y., 215, 218  
 Agnati, L., 311  
 Agosin, M., 436, 440  
 Agranoff, B. W., 325, 331  
 Aguayo, A. J., 214, 218  
 Agus, Z. S., 273, 279  
 Ahlen, A., 438  
 Ahlman, H., 469  
 Ahmed, M. M., 513, 515-17  
 Ahnfeldt-Renne, J., 277  
 Ahokas, J. T., 443, 450  
 Ahotupa, M., 440  
 Aiken, J. W., 491, 493  
 Aitio, A., 440  
 Ajmone-Marsan, C., 91  
 Akera, T., 379  
 Alabaster, V. A., 473  
 Alam, T., 497  
 Albright, F., 259  
 Aldridge, W. N., 518, 519,  
 522-24, 529, 531, 534-36  
 Alexander, E. J., 96  
 Alexander, F., 270, 273, 279,  
 283, 284  
 Alexander, L., 142  
 Algeri, S., 166  
 Allahyari, R., 528, 532  
 Allen, G. S., 21  
 Allen, J. E., 492  
 Allikmeta, L. H., 368  
 Almasi, J., 372  
 Aloe, L., 208, 210, 212, 213,  
 217, 221, 222  
 Alpers, B. J., 585  
 Alpert, L., 303  
 Altman, J., 190  
 Altmann, H., 185  
 Altmann, K. P., 20  
 Altschuler, R. A., 167  
 Alvarado-Urbina, G., 304  
 Alvarez, W. C., 468  
 Alworth, W. L., 443  
 Amaral, D. G., 341  
 Amar-Costesec, A., 554, 556,  
 561  
 Ambrus, C.-M., 471  
 Ambrus, J. L., 471  
 Amer, S. M., 501  
 Ames, B. N., 393, 399, 400  
 Ames, R. P., 278  
 Anders, M. W., 440  
 Andersen, A., 151  
 Anderson, D., 393, 394, 402,  
 403  
 Anderson, H. H., 530, 534,  
 535, 538, 539  
 Anderson, H. J., 251, 255, 256  
 Anderson, P. N., 242  
 Anderson, R. A., 49, 50, 251  
 Anderson, R. G. W., 380  
 Anderson, R. S., 450  
 Anderson, S. D., 10, 11  
 Anderson, S. M., 84  
 Anderson, W. A., 447  
 Anderson, W. R., 84  
 Anderson, O., 284  
 Andreasen, P., 584  
 Andres, R. Y., 209, 220, 221  
 ANDRESEN, B. D., 575-86  
 Andrews, P. R., 84, 87  
 Angeletti, P. U., 205-13,  
 215-18, 220-22  
 Angeletti, R. H., 218, 221  
 Angelosanto, F. A., 393, 399,  
 403  
 Anggard, E., 277, 488, 493,  
 494  
 Annunziato, L., 368  
 Ansari, A. A., 121  
 Anson, J., 191  
 Anthony, M., 463, 464, 472,  
 473  
 Anton-Tay, F. R., 311  
 Appenzeller, O., 463, 470,  
 471  
 Appleton, R., 341, 345  
 Aprison, M. H., 167, 190,  
 191  
 Arai, M., 408  
 Araki, S., 299  
 Araki, T., 183  
 Arbilla, S., 10-12, 19  
 Archer, V. E., 133  
 Arcos, J. C., 397, 404, 406  
 Argiolas, A., 369  
 Argus, M. F., 397, 404, 406  
 Arian, I. M., 270  
 Ariens, E. J., 32, 449  
 Arimura, A., 297-99, 301-4  
 Aring, C. D., 512, 517  
 Arisco, B. H., 270  
 Arisz, L., 493  
 Arita, T., 35, 40, 42, 43  
 Arkin, H., 239  
 Armstrong, J. M., 502  
 Armstrong, M., 277, 279, 284  
 Armuth, V., 145  
 Arnold, K., 440  
 Arnsten, A. F. T., 338, 347  
 Aronow, L., 432  
 Asaad, M., 588  
 Ashby, J., 393, 394, 397,  
 402-4  
 Ashby, P., 584  
 Asher, I. M., 397, 404  
 Ashry, M. A., 515, 528, 532,  
 533  
 Asmussen, E., 583  
 Assis, G. M., 368  
 Aspila, K., 577  
 Assem, E. S. K., 75  
 Aston, R., 93, 94  
 Atkinson, G., 69  
 Atlas, S. A., 134, 157, 445,  
 446, 448, 453  
 Atweh, S., 99  
 Atweh, S. F., 14  
 Auclair, C., 301, 302  
 Audibert, A., 337  
 Augstein, A., 74  
 Auker, C., 190  
 Ault, B., 171-74  
 Aur, R. J. A., 231, 233, 234  
 Aurbach, G. D., 252, 258-60,  
 471

## 616 AUTHOR INDEX

- Aust, S. D., 440  
 Austen, K. F., 75, 76  
 Austin, L., 521, 526  
 Autrup, H., 158  
 Aviado, D.M., 2  
 Avrith, D. B., 218  
 Axelrod, J., 72, 73, 219, 581  
 Ayala, J. M., 277  
 Aydelotte, M. B., 425  
 Aykent, Y. Y., 490  
 Aylsworth, C. F., 310  
 Azoulay, E., 440  
 Azukizawa, M., 120
- B**
- Babel, J., 515-17  
 Babyak, M. A., 147  
 Bach, F. H., 243  
 Bach, M. K., 73  
 Bickler, G., 12  
 Bada, J. L., 166  
 Badie, M., 515  
 Bachler, R. W., 271  
 Backeland, F., 582  
 Baer, J. E., 269, 270, 272-74, 278  
 Baer, P. G., 272  
 Baetcke, K. P., 407  
 Baetge, E. E., 168  
 Baggett, B., 84  
 Bagley, S. K., 344  
 Bahunguna, L. M., 121  
 Bailey, G. S., 206, 207, 217, 221  
 Bailey, R. C., 361, 370  
 Bailey, W. H., 336  
 Bailie, M. D., 277  
 Baker, T., 518  
 Bakke, Y. S., 473  
 Balagot, R. C., 98, 100  
 Balazs, R., 183  
 Balcar, V. J., 167, 169, 170, 187  
 Baldessarini, R. J., 366, 367  
 Ball, E., 580  
 Ball, L. M., 436  
 Ballenger, J. C., 337  
 Banaji, M., 242, 243  
 Banerjee, S. P., 14, 209, 221, 361, 365, 377  
 Bang, H. O., 484  
 Bani-Sacchi, T., 76  
 Banks, B. E. C., 206, 207, 210, 211, 215, 217, 220, 221  
 Banninger, R., 425  
 Banon, M. J., 369  
 Barquero, R. A., 277  
 Baran, T., 299, 301  
 Baras, A., 179, 181  
 Barbarulli, G., 121  
 Barbato, T., 306  
 Barbin, A., 393, 399  
 Bardawil, W. A., 34  
 Barde, Y. A., 205-9, 213, 216, 220  
 Barger, A. C., 271  
 Barger, G., 2  
 Barker, J. L., 83, 88, 89, 177, 338  
 Birland, H., 32  
 Barlow, R. B., 181  
 Barnes, A., 301  
 Barnes, C. D., 84  
 Barnes, J. M., 513-15, 518, 519, 522-24, 526-31, 534-36  
 Baron, R. L., 515, 524, 537, 538  
 Baronides, S. H., 325, 331, 332, 340, 347  
 Barowsky, N. J., 305, 309  
 Barrett, J. N., 215  
 Barrie, M. A., 466, 469  
 Bartholini, G., 10, 11, 18, 468  
 Bartilom, L., 588  
 Bartolini, G., 483  
 Bartosh, K., 464  
 Bartsch, H., 393, 399, 401  
 Bartus, R. T., 328  
 Basbaum, A. I., 470  
 Baserga, R., 91  
 Basingthwaite, E. A., 567  
 Bassiri, R. M., 305  
 Batchelor, F. R., 119  
 Bates, T. R., 33  
 Bateson, P. P. G., 332  
 Batson, A. G., 400, 403  
 Battista, A. F., 369  
 Baudry, M., 177, 178, 361, 366, 367, 370, 371  
 Bauer, J. H., 279, 284  
 Bauer, K., 306  
 Baumann, P. A., 10, 20  
 Baume, S., 372  
 Bauserman, L. L., 440  
 Baverel, G., 272, 279  
 Baxter, C. F., 100  
 Baxter, J. H., 70  
 Bayer, H. H., 534, 536, 537  
 Bayliss, R. I. S., 273  
 Bayliss, W. M., 502  
 Baylor, D. A., 182  
 Bayne, W., 44  
 Bazier, S. A., 575  
 Bazzi, L., 11  
 Beart, P. M., 12  
 Beattie, C. W., 301  
 Beattie, E. J., 133  
 Beaufay, H., 554, 556, 561  
 Beaumont, K., 177, 180, 376, 377  
 Beaumont, W., 5  
 Bechtel, W. D., 14, 358  
 Beck, J. C., 313  
 Becker, E. L., 281, 282  
 Becker, F. F., 398, 407  
 Becker, K. E., 67  
 Beckett, A. G., 512, 514  
 Beckett, A. H., 43  
 Beckwith, B. E., 335  
 Beg, M. A., 284  
 Beg, M. M. A., 279  
 Behlke, J., 433  
 Behrman, H. R., 114, 125, 490  
 Brier, S., 306  
 Belcher, D. H., 437  
 Belchetz, P. E., 297  
 Beld, A. J., 449  
 Belieu, R. M., 179  
 Belknap, J. K., 93, 95, 96, 98, 99, 102  
 Belluzzi, J. D., 338, 340  
 Bellward, G. D., 440  
 Belmaker, R. H., 364, 367  
 Belpaire, F. M., 123  
 Belshoe, R. B., 84  
 Benarroch, E. E., 11  
 Bend, J. R., 436, 438, 445  
 Bendeich, E. G., 218, 219  
 Bender, J., 512  
 Bendotti, C., 374  
 Benghezal, A., 337  
 Beninger, R. J., 341  
 Benjamin, S., 584  
 Bennett, A. J., 234  
 Bennett, C. W., 300  
 Bennett, E. L., 334, 335  
 Bennett, J. P., 67  
 Bennett, J. P. Jr., 373, 374  
 Bennett, W. M., 280, 494  
 Benson, W. R., 588  
 Bentley, P., 440  
 Beraut, A., 297  
 Berchier, P., 337  
 Berde, B., 466  
 Berenblum, J., 144, 145  
 Berg, J. H., 95, 102  
 Berg, K., 577, 588, 589  
 Berger, L., 278  
 Berger, P. A., 338  
 Berger, S. J., 167  
 Bergret, B., 166  
 Bergeron, J. J. M., 554, 556  
 Bergey, G. K., 184  
 Berglund, G., 284  
 Bergman, K., 329  
 Bergstrom, D. A., 359, 361, 363, 373  
 Bergström, S., 479, 485  
 Berking, S., 425, 426  
 Berkowitz, B. A., 468  
 Berli, T., 277  
 Berman, M., 251  
 Bernacconi, S., 468  
 Berndt, W. O., 277  
 Bernstein, S., 586  
 Bernstein, L., 471  
 Berry, G., 146, 147  
 Berson, S. A., 114

- Berthet, J., 554, 556, 561  
 Bertrand, J. C., 440  
 Bertrand, Y., 467  
 Berwald, Y., 402  
 Besser, G. M., 304  
 Bessin, P., 268  
 Benson, M. J., 10, 13  
 Bettendorf, G., 301  
 Betti, R., 313  
 Beyer, K. H., 269, 270, 272-74  
 Beyer, K. H. Jr., 275, 278, 280  
 Bianchi, C., 11  
 BIANCHINE, J. R., 575-96  
 Bicking, J. B., 266, 267, 284  
 Bidstrup, P. L., 512, 514  
 Bigdeli, M. A., 588  
 Bigelow, S. W., 443, 446, 453  
 Bigger, C. A. H., 395, 401  
 Biggio, G., 183  
 Bilboa, J., 584  
 Biles, J. A., 33, 38, 43  
 Billups, L. H., 157  
 Billups, N. F., 39  
 Biltonen, R. L., 251, 254-56  
 Binder, R. L., 450  
 Birbari, A., 277  
 Bird, A. E., 52  
 Bird, E. D., 177, 180, 370  
 Bird, S. J., 187, 255  
 Birdsall, N. J. M., 375  
 Birkmeyer, R. D., 36  
 Birnbaumer, L., 251  
 Birtch, A. G., 271  
 Bischoff, A., 515-17  
 Biscoe, T. J., 172-74, 176, 179, 188, 191  
 Bitmaa, J., 449  
 Biziere, K., 177, 178, 180, 187  
 Bjelke, E., 138  
 Bjerre, B., 206, 208, 210-12, 219, 220, 222  
 Björklund, A., 208, 212, 219  
 Black, I. B., 208, 210-12, 214-17, 221, 222  
 Blackwood, G., 330  
 Blaie, M. R., 37  
 Blake, C. A., 305, 310, 311  
 Blake, D. R., 337  
 Blanchard, M. H., 206  
 Blandina, P., 76  
 Blank, I. H., 45, 47  
 Blank, M. S., 312  
 Blasig, J., 371, 379  
 Blasingham, M. C., 271  
 Blatt, A. H., 271  
 Blaustein, M. P., 86, 87, 89  
 Bledsoe, S. C. Jr., 191  
 Blessed, G., 329  
 Bieyer, W. A., 244, 245  
 Bloch, H., 518  
 Blome, K. G., 244  
 Bloom, D. S., 472  
 Bloom, F. E., 12, 166, 324, 325, 378  
 Bloom, R. E., 339  
 Blue, J., 586  
 Bluemle, L. W. Jr., 273  
 Blume, A. J., 255  
 Blume, H. W., 176  
 Bobbin, R. P., 191  
 Bobota, G., 586  
 Bock, K., 588  
 Bockaert, J., 366  
 Bockman, D. E., 237  
 Bode, H. R., 425, 426  
 Bodison, W., 279, 280  
 Bogaert, M. G., 123  
 Bohn, D. L., 269, 270, 275, 278-80  
 Bohus, B., 333, 334, 336, 338  
 Boisse, N. R., 93-96  
 BOLENDER, R. P., 549-73; 550, 552-54, 556, 567  
 Bolger, P. M., 271, 272, 275, 277  
 Bolhofer, W. A., 266, 284  
 Bolli, P., 277, 283  
 Bolognese, J., 284  
 Bolton, A. E., 117  
 Bondy, G. P., 441-43, 452  
 Bondy, H. F., 534-36  
 Bonnell, J. A., 512, 514  
 Bonnet, J., 268  
 Bonnet, K., 367, 370, 371  
 Bonnett, K. A., 379  
 Bono, V., 91  
 Boobis, A. R., 445, 446, 453  
 Boonyaviroj, P., 16  
 Bora, K. C., 393  
 Border, D., 171  
 Borella, L., 231, 233, 235-37  
 Borella, L. D., 235  
 Boren, H. G., 140  
 Borgaonkar, D. S., 242  
 Borge, G., 583  
 Borgest, P., 479, 480  
 Borgese, N., 554, 555  
 Borison, R. L., 367, 370, 372  
 Bornstein, J. C., 167, 169, 176  
 Borowski, E., 10, 18, 20  
 Borsini, F., 374  
 Bortin, M. M., 241, 243  
 Bosher, S. K., 281  
 Bosmann, H. B., 378  
 Boss, B., 302  
 Bosse, A., 11, 372  
 Bostanci, N., 587  
 Bothe, A. E., 92  
 Bottazzo, G. F., 259  
 Böttger, L., 492  
 Boulidin, T. W., 515-17  
 Boullin, D. J., 374  
 Bourgoin, S., 11  
 Bourke, E., 278  
 Bourland, W. A., 271  
 Bourn, W. M., 93, 96  
 BOURNE, H. R., 251-64; 74, 75, 251-58, 260, 261  
 Bournias-Vardiabasis, N., 424  
 Boutquet, W. F., 440  
 Boutwell, R. K., 145  
 Bowden, D. T., 512  
 Bowen, D. M., 329  
 Bowen, J. H., 447  
 Bowers, C. Y., 301, 307, 309  
 Bowery, N. G., 10, 11, 18, 88, 170  
 Bowman, W. C., 8, 16  
 Boyarski, L. L., 177  
 Boyd, A. E., 305  
 Boyd, L. F., 215, 218  
 Boyd, M. A., 142  
 Boyd, P. A., 443  
 Boyd, W. D., 330  
 Boyer, D. M., 208, 210  
 Bozewicz, T. R., 339  
 Braceland, F., 96  
 Bracken, W. M., 154  
 Bracs, P. U., 370  
 Bradford, H. F., 167, 169-71, 189, 191  
 Bradley, A. W., 513  
 Bradley, W. G., 521  
 Bradshaw, R. A., 205-7, 209, 215, 218, 220, 221  
 Bradstock, K. F., 235  
 Braestrup, C., 378  
 Braganca, M. B., 512  
 Braithman, D., 190  
 Branch, R. A., 271, 272, 275, 495  
 Branconnier, R. J., 336  
 Brand, M. J. D., 578, 588  
 Brandeis, L., 210, 211, 217  
 Brandenbusch, G., 271, 272, 275  
 Brando, F., 10, 21  
 Brankow, D. W., 395  
 Brase, D. A., 10  
 Brasfield, D. L., 114, 116  
 Brauner, G. J., 45, 47  
 Braver, J., 303  
 Bray, G. M., 214, 218  
 Brazzo, P., 302, 304, 307  
 Breborowicz, J., 153  
 Breese, G. R., 218, 219, 340-42  
 Brennan, F. T., 278  
 Brennan, M. J. W., 12  
 Brentjens, J. R. H., 493  
 Brenner, R., 588  
 Brent, A. N., 284  
 Brewney, B. J., 401  
 Brezenoff, H. E., 84, 93, 95  
 Brickman, A. S., 252, 258-60  
 Bridges, B. A., 393, 394  
 Bridges, J. W., 35, 36, 38, 45, 55, 440  
 Bridgen, W. H., 339

# 618 AUTHOR INDEX

- Brieger, H., 585  
 Briley, M. S., 14, 359, 364, 373  
 Briley, P. A., 183, 184  
 Brimer, P. A., 400, 401, 403  
 Brindley, C. O. Jr., 91  
 Britten, R. J., 452  
 Broder, S., 96  
 Brodie, B. B., 33, 34, 536  
 Brody, M. J., 271  
 Brody, T. M., 379  
 Bromsfield, E., 440  
 Bronson, S. D., 501  
 Brooker, G., 121  
 Brookes, N., 182  
 Brookes, P., 396  
 Brooks, B., 497  
 Brooks, C. S., 279, 284  
 Brosius, W. L., 497  
 Brothers, V. M., 252, 253, 258, 260  
 Broughton, A., 124  
 Brown, B. D., 363  
 Brown, C. P., 327  
 Brown, D. A., 11, 16, 177, 178  
 Brown, E. M., 471  
 Brown, G., 368, 581  
 Brown, G. L., 9  
 Brown, G. M., 368  
 Brown, L. M., 588  
 Brown, M., 296, 302, 305  
 Brown, M. M. M., 400, 403  
 Brown, M. S., 380  
 Brown, M. W., 588  
 Brown, O. M., 340, 342  
 Brown, R. D., 281-84  
 Brown, R. M., 218, 219  
 Brown, S., 279  
 Brown, T. C., 277  
 Brown, W., 368  
 Browne, E. N., 425, 426  
 Brownstein, M. J., 218, 219, 297, 303, 305  
 Brubaker, C., 240  
 Bruce, W. R., 232  
 Brummel, R. G., 588  
 Brummett, R., 281  
 Brummett, R. E., 281, 282  
 Brun, G., 393, 399  
 Bruni, J., 296, 306, 307, 310, 313  
 Bruni, J. F., 310, 312, 313  
 Brunswick, D. J., 361, 363  
 Brunsick, D. J., 393  
 Bryant, J. L., 244  
 Bryant, S. H., 87  
 Bryce, G. F., 467  
 Bryndum, B., 464  
 Buch, H. P., 84, 85  
 Buchweitz, E., 466  
 Buck, R. C., 138, 140  
 Bucker, M., 440  
 Buckley, J. P., 19, 21  
 Buckner, C. D., 241-44  
 Budde, R. N., 92, 93  
 Buhler, D. R., 440  
 Bührle, C. P., 182  
 Bulloch, K., 168  
 Bunge, R. P., 209, 217, 218  
 Bunney, B. S., 369  
 Bunney, W. E. Jr., 359, 360, 364, 368  
 Bunting, S., 479, 481, 484, 487  
 Burbridge, T. N., 588  
 Burchenal, J. H., 231  
 Durden, J., 314  
 Burdock, G. A., 440  
 Burg, J. R., 512  
 Burg, M., 273, 275, 282, 284  
 Burgen, A. S. V., 375  
 Burger, H. G., 301  
 Burgie, V., 379  
 Burgus, R., 302  
 Burke, P. J., 242  
 Burley, B. T., 512  
 Burnett, A. L., 425  
 Burnett, C. H., 259  
 Burns, E. R., 550  
 Burns, J. J., 94, 278, 440  
 Burns, J. T., 344  
 Burnstock, G., 205-7, 222  
 Burrell, H. R., 325, 331  
 Burt, D. R., 366-68  
 Burtis, C. A., 448  
 Bush, M. T., 84  
 Busto, R., 377  
 Butcher, M., 302  
 Butcher, R. W., 467  
 Butler, I. J., 370  
 Butler, T. C., 93  
 Buttar, H. S., 515, 518, 534  
 Butters, N., 345, 347  
 Butterworth, B. E., 393  
 Buttin, G., 126, 127  
 Buzello, W., 84, 85  
 Bylund, D. B., 360, 361
- C
- Cabot, J. B., 466  
 Cafruny, E. J., 266, 267, 269, 274, 282, 285  
 Cagen, L., 491  
 Caggiula, A. R., 372  
 Cahill, J., 361, 370  
 Cailla, H. L., 120  
 Caillet-Pauquet, P., 399  
 Caine, E. D., 330  
 Cairncross, K. D., 472  
 Calabresi, P., 91  
 Caldwell, B. V., 490  
 Calissano, P., 210, 217, 222  
 Calnan, C. D., 44  
 Camera, E., 577  
 Cameron, S., 281  
 CAMITTA, B. M., 231-49; 242  
 Campbell, J., 208, 209, 212, 216, 217, 221  
 Campbell, R. D., 425, 426  
 Campbell, R. L., 191  
 Campenot, R. B., 208, 220  
 Campochiaro, P., 14, 180, 183, 191  
 Camus, A. M., 393, 399  
 Canellakis, E., 579  
 Cannon, P. J., 278  
 Cantrill, R. C., 12  
 Canzek, V., 190  
 Capozza, R., 44  
 Caramia, F., 208, 210-12, 215, 220, 222  
 Cariou, B., 268  
 Carlson, G. P., 440  
 Carlson, H. E., 259  
 Carlson, K. R., 372  
 Carlson, L. A., 473  
 Carlson, A., 9  
 Carlson, C., 471  
 Carmichael, E. B., 93  
 Carmichael, F. J., 88, 89  
 Caron, M. G., 251  
 Carpenter, D., 190  
 Carr, K., 490  
 Carrasco, L. H., 329  
 Carretero, O. A., 498  
 Carroll, J. D., 469  
 Carson, D. A., 65  
 Carson, V. G., 375  
 Carstairs, J. R., 205-7, 210, 211, 217, 220, 221  
 Carter, D. A., 341  
 Carter, J. A., 167, 191  
 Carter, J. G., 167  
 Casanueva, F., 313  
 Casazza, G., 367  
 Case, K. R., 378  
 Caserta, M. T., 214  
 Casida, J. E., 515, 518, 524, 537, 538  
 Casper, J. T., 235, 237  
 Casnel, D., 253, 254  
 Castel, V., 128  
 Castellano, C., 338  
 Castellucci, V. F., 332  
 Castrucci, G., 484  
 Cava, M., 183  
 Caton, J. E. Jr., 135  
 Catt, K. J., 301  
 Cattabeni, F., 368  
 Cavanagh, J. B., 512-17, 536  
 Caverio, I., 19  
 Casenave, P. A., 126, 127  
 Cecil, H. C., 449  
 Cefis, F., 148, 149  
 Cerimiele, B., 310  
 Cerletti, A., 471  
 Cermak, L. S., 345, 347



- Cerniglia, C. E., 450  
 Cerny, E. A., 34  
 Ceron, G., 424  
 Cerrito, F., 11, 367  
 Cervoni, A. M., 10  
 Cevallos, C., 167  
 Chabi, E., 464  
 Chabner, B., 245  
 Chace, P. M., 327  
 Chakrabarti, C. L., 577  
 Chalmers, J. P., 466  
 Chambers, W., 92  
 Champagnat, J., 181  
 Champion, C., 280  
 Champion, G. D., 74  
 Chan, C. C., 19, 20  
 Chanda, S. K., 361  
 Chandrasekaran, S. K., 44  
 Chang, C. C., 395  
 Chang, H. H., 179  
 Chang, K., 380  
 Chang, L. C. T., 271, 272  
 Chang, M. M., 183  
 Chang, T. L., 86  
 Chang, Y.-Y. H., 90, 98-100  
 Chao, P. H.-W., 491, 496  
 Chapelsky, L., 359  
 Chapman, C. A., 206  
 Charlwood, K. A., 215  
 Chase, L. R., 259  
 Chastagne, F., 166  
 Chatot, C. L., 427  
 Chau-Wong, M., 87  
 Chefurka, W., 580  
 Chen, C.-S., 95, 96  
 Chen, H. J., 314  
 Chen, H. T., 300, 310, 312, 314, 315  
 Chen, J. S., 208, 218  
 CHEN, K. K., 1-6; 2-6, 92, 93  
 Chen, M. G., 136  
 Chen, S. S., 87  
 Cheney, D. L., 189, 377  
 Cheng, H., 554, 556  
 Cheramy, A., 18  
 Cherrill, D. A., 273, 279, 284  
 Chesells, J. M., 234-36  
 Cheung, C. Y., 368  
 Chey, W., 315  
 Chhabra, R. S., 445  
 Chiang, G. H., 167, 189  
 Chiba, S., 482  
 Chien, Y. W., 53  
 Chiesara, E., 94  
 Chihara, K., 302, 304  
 Childers, S. R., 338  
 Chin, J. H., 86  
 Chiodo, L. A., 372  
 Chirawong, P., 494  
 Chiu, T. H., 378  
 Chock, D., 277, 279, 284  
 Chokshi, D. S., 495  
 Christensen, A. V., 367  
 Christenson, J., 130  
 Christian, J., 440  
 Christiansen, J., 14  
 Chrysant, S. G., 279, 284  
 Chu, E. H. Y., 399  
 Chuang, D.-M., 362, 380  
 Chubb, N. C., 344  
 Chun, L. L. Y., 208, 209  
 Churchill, L., 375  
 Churg, J., 133, 146, 148  
 Ciabattini, G., 484  
 Ciancone, D., 587  
 Cinti, D. L., 440  
 Circilo, V. J., 501  
 Clack, J., 134  
 Claessens, J., 337  
 Cianchan, A. S., 10  
 Clapp, N. K., 448  
 Clark, B. B., 37  
 Clark, C., 336  
 Clarke, D., 588  
 Clarke, G., 12  
 Claydon, D. B., 138, 397, 404  
 Cleaver, J. E., 401  
 Cleaves, C. A., 84  
 Cleeland, R., 130  
 Clemens, J. A., 307, 308, 310  
 Clement-Cormier, Y., 367  
 Clement-Cormier, Y. C., 370  
 Clements, J., 91  
 Clements, J. A., 586  
 Clements-Jewery, S., 363  
 Clemmesen, J., 412  
 Clendenning, W. E., 45, 48  
 Clift, R. A., 241-44  
 Clifton, D. K., 311  
 Cline, J. C., 393, 399  
 Clinic, H. M., 242  
 Clive, D., 400, 403  
 Clow, A., 367  
 Clyman, R. L., 501  
 Cobby, J., 577-79, 589  
 Cocchi, D., 313, 372  
 Coccia, P., 244  
 Cochrane, D. E., 67  
 Cockerline, R., 440  
 Cockroft, S., 67, 71  
 Cocola, F., 121  
 Coffey, D., 581  
 Collino, P., 252-57  
 Cohen, B., 434  
 Cohen, D. H., 466  
 Cohen, E. P., 128  
 Cohen, G., 583  
 Cohen, L. H., 280  
 Cohen, N., 326, 327, 345, 346, 348  
 Cohen, S. M., 408  
 Coldman, A. J., 240  
 Cole, J. O., 336  
 Cole, K. S., 32, 183  
 Cole, M., 330  
 Colello, G. D., 378  
 Coleman, D. L., 440  
 Coleman, R., 86  
 Colina-Chourio, J., 498, 499  
 Collander, R., 32  
 Colle, E., 302  
 Collier, B., 329, 330  
 Collier, H. O. J., 357, 379  
 Collier, P. F., 412  
 Collingridge, G. L., 172-74  
 Collins, G. G. S., 188, 190, 191  
 Collins, J. M., 588  
 Collins, M., 583, 588  
 Collins, M. J., 183  
 Colyer, S. P., 448  
 Comegys, T. H., 281, 282  
 Condie, L. W., 440  
 Cone, V., 138, 140, 145  
 Conning, D. M., 412  
 Conney, A. H., 94, 395, 439, 440, 447, 556  
 Connor, J. D., 181, 189  
 Conrad, D. M., 65  
 Considine, N., 444  
 Constanti, A., 165, 177, 181  
 Conte, F., 252, 258, 260  
 Contrera, J. F., 177, 180  
 Coarway, J., 284  
 Cooke, C. R., 277  
 Coon, M. J., 395, 432, 433, 436, 445, 453  
 Cooper, B. R., 340-42  
 Cooper, P. W., 466  
 Coral, F., 235, 236  
 Corbett, T. H., 141  
 Corbin, A., 301  
 Corcorran, N. L., 314  
 Corda, M. G., 183  
 Corey, E. J., 271, 272, 275, 277  
 Cornbleet, M. A., 234  
 Cornu, F., 440  
 Corran, H., 580  
 Corrodi, H., 90  
 Cossins, A. R., 102  
 Costa, E., 91, 166, 189, 215, 216, 362, 367, 368, 377, 380, 468, 606, 607  
 Costa, M., 222  
 Costall, B., 369  
 Costentin, J., 366, 367, 370-72  
 Cotman, C. W., 88, 167, 189, 190, 375  
 Cotton, R. G. H., 126  
 Cottrill, C. A., 512  
 Couch, J. R., 464, 472  
 Coughlin, M. D., 208, 210, 215  
 Courney, M. M., 530, 534, 535, 538, 539  
 Coutinho-Netto, J., 171  
 Coverstone, M., 251

## 620 AUTHOR INDEX

- Cox, B., 11  
 Cox, D. W. G., 167-70, 181, 184, 189  
 Coy, D. H., 296, 297, 301, 302, 338  
 Coyle, J. T., 14, 177, 178, 180, 183, 187, 191, 219  
 Cozzari, C., 210, 217, 222  
 Crabbe, J. C., 336  
 Cragoe, E. J., 266  
 Cragoe, E. J. Jr., 265-68, 272, 280, 284  
 Craighead, J. E., 148, 151  
 Crain, S. M., 216  
 Cramer, G. M., 393, 394  
 Cramer, J. W., 91  
 Crawford, I. L., 189  
 Creager, R., 177  
 Cressia, D. A., 141-43, 149-51  
 CREESE, I., 357-91; 14, 338, 366-68, 370, 375, 380  
 Crews, F. T., 72, 360, 364  
 Crifo, S., 281  
 Crighton, D., 297  
 Crist, W. M., 235, 237  
 Critchlow, V., 306  
 Cross, A. J., 367  
 Cross, R. M., 530, 534, 535, 538, 539  
 Cronsett, P., 361  
 Crossland, J., 95, 96, 98, 100, 166  
 Crouthamel, W. G., 38  
 Crow, T. J., 367, 370  
 Crownshaw, K., 482, 486, 488, 489, 493, 500  
 Crump, W. J., 277  
 Crutcher, K. A., 366  
 Cuatrecasas, P., 209, 221, 380, 483  
 Cubeddu, L. X., 20  
 Cucchi, J., 277  
 Cucinell, S. A., 440  
 Cuemod, M., 189, 190  
 Cullen, S. E., 120  
 Cumming, I. A., 301  
 Cummins, J. T., 189  
 Curley, A., 513, 514  
 Curran, D. A., 464, 472  
 Curran, P. F., 41  
 Currie, B. L., 300  
 Curtis, D. R., 165-67, 169, 172, 175-77, 181, 184, 185, 188, 191  
 Curtis, H. J., 183  
 Curzon, G., 469  
 Cusan, L., 301, 302  
 Custod, J. T., 588  
 Cuthbertson, G. J., 187  
 Cutler, R. W. P., 88-90  
 Cynthia, H., 587  
 Cyslin, R. R., 425
- D**  
 Dahl, L. K., 448  
 Dahlöf, C., 10  
 Dahlström, A., 469  
 Dahms, R. P., 448  
 Daigneault, E. A., 283  
 Dale, H. H., 2  
 Dalgliah, F. W., 375  
 Dallner, G., 554, 556, 557  
 Dallob, A., 368, 373  
 Daly, J., 434  
 Daly, J. W., 364  
 D'Amico, D. J., 374  
 Dana, N., 361  
 Danielli, J. F., 32, 33  
 D'Aniello, A., 166  
 Daniels, E. G., 481, 497  
 Dantzig, G. B., 558  
 Darmenton, P., 270  
 Das, M., 556  
 Dastoor, D., 329, 330  
 Dastur, D. K., 512  
 Data, J. L., 277  
 Daughaday, W. H., 114, 121  
 Daughterman, W. C., 528, 532, 533  
 Daves, G. D., 84  
 David, C. N., 423, 426  
 Davidoff, R. A., 170, 191  
 Davidson, E. H., 452  
 Davidson, K. A., 448  
 Davidson, M., 578  
 Davies, D. R., 512-14, 516, 524-28, 530, 532  
 Davies, J., 169-77, 180, 184, 185, 188, 191  
 Davies, L. P., 166, 170, 187  
 Davies, P., 329  
 Davies, P. J., 400  
 Davis, C. S., 519  
 Davis, G. W., 149, 150  
 DAVIS, H. P., 323-56; 332, 334  
 Davis, J. M., 359, 362, 363, 368  
 Davis, J. N., 363, 366  
 Davis, J. O., 277  
 Davis, K. L., 329-31  
 Davis, L. E., 426  
 Davis, M. E., 379  
 Davis, R., 130  
 Davison, A. N., 518, 527-29  
 Davison, C., 440  
 Davson, H., 32  
 Day, R. O., 74  
 Dayton, P. G., 587  
 Deana, A. A., 267  
 Dearden, J. C., 44  
 Debeljuk, L., 297  
 de Belleroche, J. S., 171  
 De Bernardo, R., 75  
 de Boer, A. A., 13  
 DeCarli, L. M., 582  
 de Carvalho, J. G. R., 279, 284  
 de Champlain, J., 10  
 Decloitre, F., 440  
 deCotte, D. M., 300  
 DeDuve, C., 554, 556  
 Defais, M., 399  
 DeFeudis, F. V., 165  
 de Gubareff, T., 166  
 Deguchi, T., 84  
 DeHoff, R. T., 530  
 De Jonge, H., 93  
 deKretser, D. M., 301  
 Delaage, M. A., 120  
 de la Baume, S., 14, 18  
 de la Cruz, K. G., 301  
 de la Iglesia, F. A., 412  
 Delaney, R. K., 219, 222  
 De Langen, C. D. J., 10, 14  
 del Carmine, R., 10  
 del Greco, F., 277, 279, 284  
 Delia, D., 235, 236  
 Delic, V., 585  
 Deloria, L. B., 450  
 Delves, A., 93  
 De Marchi, W. J., 166  
 DeMason, L., 554, 556  
 DeMaster, E., 585  
 Dembinska-Kiec, A., 498  
 de Meester, C., 440  
 deMenezes, C. E. L., 300  
 de Montigny, C., 373  
 Demura, H., 303  
 Demura, R., 303  
 den Broejen, E. J. S., 10  
 Dencke, S., 586  
 Denk, H., 440  
 Dennis, T., 19  
 Dennison, M. E., 205-7  
 Dennis, P., 298, 304  
 Denz, F. A., 513, 515, 526-28, 530  
 De Oliveira, M. P., 75  
 DePierre, J. W., 554  
 Derby, G., 588  
 Dericks-Tan, J. S. E., 300  
 De Robertis, E., 179, 180, 210, 220, 221, 449  
 DeSaint-Blancquet, G., 576  
 De Salvo, A., 484  
 DeSerres, F. J., 393, 394  
 Deshmukh, S. V., 464  
 Desiderio, D. M., 491, 495, 496  
 de Solms, S. J., 265, 266, 268, 272, 280  
 DeSombre, E. R., 447  
 Desy, L., 301  
 deTreville, R. T. P., 147  
 Deuben, R. R., 306  
 Deuel, H., 92  
 Deutsch, E. W., 45

- Deutsch, J. A., 326, 327, 346, 347  
 deVane, G. W., 302  
 Dewan, J., 580  
 Dewdney, J. M., 119  
 de Wied, D., 333, 334, 336, 338  
 Dhariwal, A. P. S., 302  
 Diamant, B., 67  
 Diamond, B. I., 367, 370, 372  
 Diamond, J. M., 48  
 Diamond, L., 39  
 Diamond, L. K., 232  
 Diamond, S., 464  
 Diaz, L. I., 515  
 Dibner, M. D., 214, 221, 222, 362  
 DiBona, G. F., 277  
 Dickens, M., 440  
 Dierich, A., 95  
 Dietrich, R. A., 580, 588  
 Dietze, G., 492  
 Dille, J. M., 92, 93  
 Dilley, J., 126  
 DiPaolo, J. A., 402  
 Dipple, A., 395, 401  
 Direnfeld, L., 370  
 Di Renzo, G., 368  
 Dismukes, K., 13, 364  
 Dismukes, R. K., 338  
 DiStefano, P., 378  
 Dittert, L. W., 38, 39  
 Divac, I., 168, 170, 189  
 Divatia, K. J., 588  
 Dixon, R. L., 233, 425  
 Dixon, W. R., 10  
 Djuric, D., 585  
 Dluhy, R. G., 271, 489  
 Doble, A., 10, 11, 18, 170  
 Dobson, R. E., 10, 19  
 Docherty, J. R., 19  
 Dodd, D., 577, 588, 589  
 Dodd, M. J., 337  
 Dodd, P. R., 189  
 Doepfner, W., 471  
 Doggett, N. S., 12  
 Dogterom, J., 336  
 Dokas, L. A., 325, 331  
 Doll, R., 151  
 Dollery, C. T., 284  
 Dolphin, A., 366  
 Doluisio, J. T., 38, 39  
 Domar, G., 577, 588, 589  
 Donker, A. J. M., 493  
 Donnelly, A. J., 151  
 Doran, W. J., 84  
 Dornbush, R. L., 335  
 D'Orsi, C. J., 237  
 Dosoretz, D., 300  
 Douglas, W. W., 67, 69, 76  
 Dowling, M. D. Jr., 231  
 Downes, H., 84  
 Downs, R. W., 252, 258, 260  
 Drabkin, D. L., 92  
 Drachman, D. A., 328  
 Draper, A. H., 512  
 Drawbaugh, R. B., 368, 372  
 Dray, A., 88, 172-74, 188, 191  
 Dray, F., 371  
 Drevon, C., 393, 399  
 Drew, R. T., 156  
 Drezner, M. K., 259  
 Driscoll, P. A., 340  
 Drochmans, P., 554, 556  
 Druckrey, H., 396  
 Dubb, J. W., 270, 273, 279, 283  
 Dubocovich, M. L., 10, 16  
 Dubois, K. P., 524  
 Ducharme, D. W., 500  
 Duckworth, J. W., 465, 473  
 Dudek, B. R., 520  
 Dudzinski, D. S., 88-90  
 Dufau, M. L., 301  
 Dufrene, M. J., 442  
 Duggan, A. W., 174, 176, 184  
 Duggan, D. E., 266, 270, 285  
 Dum, J., 379  
 Dumas, M., 209, 215  
 Duncan, C. J., 8, 11, 13  
 Duncan, H. J., 338  
 Dunham, E. W., 501  
 Dunlap, M. K., 530, 534, 535, 538, 539  
 Dunn, A. J., 326, 331-34, 338, 344, 346  
 Dunn, F. G., 279, 284  
 Dunn, J. D., 306  
 Dunn, M. J., 497  
 Dunstan, R., 360, 376  
 Dupont, A., 304  
 Dupre, J., 313  
 DURAN, D. O., 575-96  
 Durham, W. F., 522-24, 528, 530, 532, 534, 536  
 Duritz, G., 582, 588  
 Dussault, J., 304  
 Dussault, P., 585  
 Dusting, G. J., 491, 501  
 Dutta, S., 588  
 Dutton, G. J., 433  
 Duval, A. J. III, 281, 283  
 Dvorak, J., 305  
 Dyck, P. J., 584  
 Dyerberg, J., 484  
 Dzienanowska, Z. E., 284  
  
 E  
 Eades, C. G., 380  
 Eames, P. G., 337  
 Earl, C. J., 518  
 Earley, L. E., 273, 274  
 Early, J. A., 495, 497  
 Ebbeson, P., 135  
 Ebdal, T., 215, 216, 219  
 Ebert, J. D., 427  
 Ebstein, R. P., 364, 367  
 Eckertorfer, R., 440  
 Eckstein, F., 75  
 Eckstein, L., 16  
 Ector, A. C., 86, 87  
 Eddy, N. B., 92  
 Edelman, I., 379  
 Edgar, D., 206, 208, 209, 216, 220  
 Edgren, R. A., 301  
 Edmeads, J., 466  
 Edvinsson, L., 465, 471, 472  
 Edwards, D. C., 206, 207, 210-12, 217, 220-22  
 Edwards, T. P., 586  
 Edwardson, J. A., 300  
 Efendic, S., 303  
 Eggleston, L. V., 168  
 Ehler, F. J., 375  
 Ehrenberg, L., 396  
 Ehrl, H., 20  
 Eibs, H., 424  
 Eide, I., 277  
 Eide, R. P., 333  
 Eidelman, B. H., 472  
 EISEN, H. J., 431-62; 440-43, 449, 451-53, 584  
 Eisen, H. N., 129  
 Eisen, S. A., 75  
 Eisner, G. M., 271, 272, 275, 277  
 Ekelund, L.-G., 473  
 Eknoyan, G., 273, 278  
 Ekwall, T., 97, 98  
 el Azhary, R., 450  
 Elcombe, C. R., 440, 445  
 Elde, R., 303  
 Eldjarn, L., 577, 586, 588  
 El-Hawari, A., 587  
 Elias, H., 550  
 Eling, T. E., 515  
 Elisabethsky, E., 338  
 Elkind, K. E., 298, 303  
 Elkins, D., 44  
 Elliott, K. A. C., 89  
 Ellis, I., 279, 280  
 Elrod, S. V., 87, 89, 102  
 Elshourbagy, N. A., 437, 440  
 Elson, E. L., 65  
 Etherington, L. G., 84  
 Elvove, E., 512, 513  
 Emmelot, P., 395, 398, 410  
 Emerson, B. T., 280  
 Emmerson, J. L., 440  
 Emson, P. C., 11  
 End, D., 218  
 Endo, T., 18, 20  
 ENEANYA, D. I., 575-96  
 Enemkel, W., 284

## 622 AUTHOR INDEX

- Enero, M. A., 300  
 Eneroth, P., 310, 438  
 Engberg, L., 177, 181-83  
 Engel, E. W., 512, 518, 534-36  
 Engel, J., 367, 371  
 Engel, J. L., 524, 537, 538  
 Engel, W. K., 521  
 Englund, E., 150  
 Enna, S. J., 97, 98, 100, 101, 359-62, 364, 373, 374, 376-78  
 Ennis, M., 67, 69, 220, 221  
 Enomoto, K., 433  
 Epelbaum, J., 302  
 Epp, L. G., 425  
 Erinkö, O., 350  
 Erb, B. B., 273, 279, 283, 284  
 Erdos, E. G., 500  
 Erdos, J. J., 255  
 Erickson, G. F., 302  
 Erickson, R., 268  
 Ericson, J. I. E., 556, 559  
 Erikson, A. L., 277  
 Erikson, L. C., 554  
 Erna, M. C., 84  
 Ernster, L., 554, 559  
 Erulkar, S. D., 170, 182  
 Erwin, V., 580, 588  
 Escalona, L., 450  
 Escudero, E., 179, 181  
 Essig, C. F., 93, 95, 96, 100  
 Estabrook, R. W., 395, 433, 434  
 Etienne, P., 329, 330  
 Eto, M., 515, 518, 524, 530, 536-38  
 Eto, T., 515, 518  
 Ettinger, G. H., 93  
 Evans, J. G., 337  
 Evans, J. T., 448  
 Evans, M. G., 471  
 Evans, R. B., 512, 535, 537  
 EVANS, R. H., 163-204; 168, 169, 171-77, 179-85, 187, 188, 191  
 Everitt, B. J., 311  
 Ezrin-Waters, C., 367, 370  
  
**F**  
 Fabacher, D. L., 440  
 Fadda, F., 369  
 Fadum, S. Z., 271, 277  
 Fagan, J. D., 370  
 Fagg, G. E., 191  
 Fahl, W. E., 443  
 Faiman, M., 577, 588, 589  
 Fairhurst, A. S., 375  
 Faivre-Bauman, A., 306  
 Falck, B., 468  
 Falk, P., 242  
 Falkenheim, S., 73, 74  
 Falletta, J., 235  
 Fallon, H., 91  
 Familiar, R. G., 270, 273, 279, 283  
 Fan, D. F., 301  
 Fansburg, B., 586  
 Fanelli, G. M. Jr., 268-70, 275, 278-80  
 Fang, V. S., 259, 310  
 Fantozzi, R., 76  
 Farago, A., 588  
 Farber, E., 138, 407, 408  
 Farber, S., 232  
 FARFEL, Z., 251-64; 251-54, 258, 260  
 Farley, D. B., 271  
 Farley, I. J., 370  
 Farmer, J. F., 74  
 Farquhar, M. G., 554, 556  
 Farrell, R. L., 149, 150  
 Pasco, M. J., 440  
 Fava, A., 577  
 Fawcett, C., 303  
 Fawcett, D. W., 556  
 Feer, H., 374  
 Fefer, A., 241-44  
 Feig, S., 242  
 Feinleib, M., 578  
 Feld, E. A., 511  
 Feldman, A. M., 284  
 Felix, D., 190  
 Felton, D. L., 191  
 Felton, J. S., 445, 446, 453  
 Fenink, W., 10  
 Fennell, T. R., 440  
 Fensch, F. C., 344  
 Fenton, J. C. B., 515  
 Fenwick, L., 501  
 Ferguson, H. C., 501  
 Ferguson, J. K., 588  
 Ferguson, K. M., 252-55  
 Ferin, M., 299  
 Ferland, L., 302, 310  
 Fernandes, M., 280  
 Fernandez, B., 167  
 Fernandez, P. C., 279, 280  
 Fernstrom, J. D., 468  
 Feron, V. J., 156, 157  
 Ferraris, A., 374  
 Ferreira, S. H., 485, 489  
 Ferrendelli, J. A., 86, 87, 183, 484  
 Ferris, S. H., 336  
 Fewtrell, C., 67  
 Fewtrell, C.M.S., 65, 66  
 Fex, J., 167  
 Feytmans, E., 556  
 Fiala, E., 586  
 Fiala, E. C., 406, 411  
 Fialkow, P. J., 244  
 Fibiger, H. C., 14, 340-43, 347  
 Field, E. J., 534-36  
 Fielda, H. L., 470  
 Fielda, J. Z., 177, 180, 376, 377  
 Filskie, B. K., 425  
 Pindlay, J. K., 301  
 Pindlay, S. R., 75  
 Fine, A., 170, 182  
 Fine, L. G., 270, 275  
 Fink, M., 335, 368  
 Finkelman, S., 11  
 Fischer, N. D., 281  
 Fishback, J., 299, 303  
 Fisher, H. K., 586  
 Fiazar de Piazas, S., 179, 180  
 Fitch, R. H., 94  
 Fitzgerald, J. E., 412  
 Fitzgerald, T. J., 270, 282  
 Fitzsimons, J. T., 218  
 Fjalland, B., 367  
 Flamm, W. G., 393, 394  
 Flanary, H. G., 93, 95, 96  
 Flanagan, W. J., 273  
 Flatman, J. A., 177, 181-83  
 Flattery, K. V., 210-13  
 Fleet, B., 578, 588  
 Flick, F. H., 576, 587  
 Flick, K., 425  
 Flint, B. A., 93, 98, 101  
 Flood, J. F., 335  
 Florsheim, W. H., 314  
 Flournoy, N., 242-44  
 Flower, N. E., 425  
 Flower, R., 483  
 Flynn, G. L., 44  
 Fobes, J. L., 342  
 Fyfe-Moller, F., 464  
 Folkers, K., 300, 301, 307, 309  
 Foltz, E. L., 273  
 Fondekari, R. B., 512  
 Fonnnum, F., 170, 187, 189, 190  
 Fontaine, R. N., 85  
 Ford, R. A., 393, 394  
 FOREMAN, J. C., 63-81; 63, 67-70, 75, 76  
 Forman, L. J., 304  
 Forney, R. B., 582  
 Forsman, B., 464  
 Förster, W., 33  
 Forster-Gibson, C. J., 442  
 Fosbray, P., 11, 13  
 Foss, J. A., 341  
 Foster, A. C., 190  
 Foster, G. A., 177, 178, 180  
 Fouts, J. R., 445  
 Fowlks, W. L., 432  
 Fox, A. J., 412  
 Fox, C. F., 401  
 Fox, K. E., 282  
 Fox, S., 170  
 Fox, W. R., 466  
 Fozard, J., 9, 10, 17  
 Fozard, J. R., 10  
 Fraker, P. J., 118  
 Francis, A. A., 168, 169, 171-77, 180, 181, 184, 185, 188, 191

- Franco, S., 88  
 Frangi, U., 190  
 Frank, A. L., 133  
 Frank, K., 8  
 Frankhuysen, A. L., 11, 17  
 Franklin, M. R., 434  
 Franklin, R. T., 440  
 Frazer, H. F., 93, 95, 96  
 Frawley, J. P., 528, 532, 534  
 Frawley, T. F., 490  
 Frazer, A., 361-63, 373  
 Frazier, D. T., 84, 85  
 Frazier, W. A., 207, 215, 218  
 Frazier, W. H., 512, 513  
 Fred, C., 581  
 Frederickson, R. C. A., 21, 379  
 Fredga, A., 577, 588, 589  
 Fredholm, B. B., 10, 75  
 Freed, W. J., 378  
 Freeman, C. G., 170  
 Freeman, J. J., 365  
 Freeman, R. H., 277  
 Frei, E., 91, 231, 238, 239  
 Frei, E. III, 91  
 Freireich, E. J., 91  
 Freis, E. D., 279, 284  
 Freund, G., 95, 96  
 Frey, W., 300  
 Fridkin, M., 299, 301  
 Fridovich, L., 586  
 Fried, R., 588  
 Friedberg, E. C., 401  
 Friedell, G. H., 408  
 Friederici, D., 443, 446, 453  
 Friedhoff, A. J., 11, 362, 367, 370, 371  
 Friedle, N. M., 189  
 Friedler, R. M., 273, 274  
 Friedman, E., 367, 368, 373, 466  
 Friedman, M. B., 86  
 Friedman, R., 345  
 Friedman, S., 581  
 Friedrich, U., 252  
 Friend, W. C., 368  
 Fries, G. F., 449  
 Friesen, H. G., 312, 313  
 Friesinger, G. C., 271, 272, 275  
 Frigerio, C., 313  
 Friith, C. H., 407  
 Froese, A., 65  
 Frohlich, E. D., 279, 284  
 Frohman, L., 368  
 Frohman, L. A., 309  
 Frölich, J. C., 272, 277, 490, 495  
 Fruze, K., 333  
 Fry, C. L., 499  
 Fry, J. P., 379  
 Frysinger, R. C., 340  
 Fujii-Kuriyama, Y., 433, 554, 555  
 Fujimori, H., 518  
 Fujisawa, T., 425  
 Fujita, N., 14, 376  
 Fujita, T., 53  
 Fuka, Z., 242  
 Fukuda, H., 170, 182, 183  
 Fukuto, T. R., 515, 523, 528, 531, 532  
 Füllgraff, G., 271, 272, 275  
 Fuller, R. W., 467  
 Funcke, H. von, 492  
 Fuortes, M. G. F., 8  
 Furchgott, R. F., 20  
 Fuxe, K., 90, 310, 311, 343  
 Fuyat, H. V., 528, 532, 534  
 Fysh, J. M., 440
- G**  
 Gaddum, J. H., 485, 491  
 Gagnon, C., 206-8, 212  
 Gainer, H., 88  
 Gaines, T. B., 522-24, 528, 530, 532, 534, 536  
 Galanti, G., 491  
 Gale, K., 377  
 Gale, R. P., 242  
 Galen, R. S., 121  
 Galgoczi, B., 255  
 Galicich, J. H., 244, 245  
 Gallagher, D. W., 368, 468  
 Gallagher, M., 338, 340, 347  
 Gallo, M., 440  
 Galloway, S. M., 443  
 Galvan, M., 181  
 Gamble, S. J., 367  
 Game, C. J. A., 175  
 Ganapathi, M., 377  
 Ganeshagura, K., 235  
 Ganong, W. F., 296, 306, 307, 314, 315  
 Ganten, D., 333  
 Garcia, A. G., 10  
 Garcia-Sevilla, J. A., 10, 359  
 Gardner, J. D., 471  
 Gardner-Thorpe, C., 584  
 Gardos, G., 336  
 Garland, L. G., 70, 76  
 Garrettsand, L. K., 587  
 Garrison, A. M., 218, 219  
 Garrison, J. C., 257  
 Garrud, P., 333  
 Garthwaite, J., 183  
 Gastel, R., 440  
 Gates, G. A., 281  
 Gates, G. R., 95, 96  
 Gaudet, R. J., 473  
 Gauthier, S., 329, 330  
 Gay, V. L., 116  
 Gaylor, J. L., 445  
 Geddes, D., 343  
 Gehring, U., 252  
 Geisler, A., 368  
 Gelato, M., 309  
 Gelber, R., 235, 236  
 Gelboin, H. V., 395, 440, 446  
 Gendrich, R. L., 301  
 Genesau, J., 300  
 Genefke, I. K., 464  
 Genta, V. M., 136, 140  
 George, J. M., 335  
 George, S. L., 234  
 Gephy, E. B., 443  
 Gerall, A. A., 298, 303  
 Gerard, D. L., 576  
 Gerard, K. W., 324  
 Gerber, J. G., 271, 272, 275, 277  
 Gerber, N., 440  
 Gerkena, J. F., 271, 272, 275, 495  
**G**  
 Germain, G., 497  
 German, D. C., 360  
 Germon, C., 512  
 Gerritsen, M. E., 502  
 Gerschenfeld, H. M., 467  
 Gershon, S., 336, 367, 368, 466, 581  
 Gerstner, H. B., 512  
 Gessa, G. L., 183, 369  
 Gessner, T., 579  
 Giammusso, G., 372, 376  
 Giarman, N. J., 576, 587  
 Gibaldi, M., 33  
 Gibbons, R. T., 94  
 Gibbs, D. M., 309  
 Gibbs, M. E., 331, 332  
 Gibson, D. T., 450  
 Gibson, P. H., 329  
 Gibson, W. R., 84  
 Gidley, J. T., 84  
 Gierer, A., 425, 426  
 Gilbert, P. E., 380  
 Gill, D. M., 253, 254  
 Gill, E. W., 86  
 Gillespie, D. D., 363  
 Gillespie, E., 74  
 Gillespie, J. S., 9, 11, 17  
 Gillette, J. R., 395, 556, 579  
 Gillies, A. H. B., 284  
 Gilliland, T., 98, 101  
 Gillin, J. C., 330, 378  
 Gilman, A., 611  
 Gilman, A. G., 251-58, 261, 611  
 Gilot, P., 337  
 Ginsberg, A. L., 584  
 Giorgiuffi, M. F., 10, 11, 13, 171  
 Giorgiuffi-Chesalete, M. F., 10, 11, 13  
 Gispén, W. H., 333, 334, 336, 344  
 Gissvold, O., 266, 282  
 Githens, S., 424  
 Giuditta, A., 166  
 Glasebrook, A. L., 440

## 624 AUTHOR INDEX

- Glaser, G. H., 471  
 Glatt, H. R., 440  
 Glaubiger, D., 245  
 Glaze, K. A., 218, 219  
 Glazer, E. J., 518  
 Gleason, M. K., 255, 256  
 Gloss, P., 513, 515-17, 520  
 Glen, I., 330  
 Glickman, S. E., 324  
 Glover, A. B., 21  
 Glover, E., 441-43, 448, 452  
 Glowinski, I. B., 448  
 Glowinski, J., 10, 11, 13, 18, 171, 312  
 Glucksberg, H., 241, 242  
 Gnegy, M., 367  
 Gnosspelius, Y., 556  
 Godfrey, D. A., 167, 191  
 Godfrey, E. W., 209, 221  
 Goedert, M., 208, 210-14, 220-22  
 Goetz, C. G., 361, 370  
 Goetze, A., 65  
 Golani, M., 440  
 Gold, P. E., 324, 325, 332, 334-37, 339-42, 344, 345, 347  
 Gold, P. W., 337  
 Goldbaum, L. R., 93  
 Goldberg, M., 273, 279  
 Goldberg, N. D., 501  
 Goldfain, E., 512  
 Goldfarb, C., 583  
 Goldie, J. H., 240  
 Goldin, A., 239  
 Goldschmidt, B. M., 146, 153  
 Goldstein, A., 375, 432  
 Goldstein, D. B., 86, 93, 95, 376  
 Goldstein, E. J., 270  
 Goldstein, J. L., 380  
 Goldstein, M., 210, 211, 217, 311, 333, 369, 581  
 Goldyne, M., 481  
 Gomersall, J. D., 464, 472  
 Gomez-Barriocanal, J., 179, 181  
 Gomi, T., 435, 436  
 Gomoll, A. W., 501  
 Gomperts, B. D., 67, 71, 76  
 Gonnard, P., 183, 184  
 Gontovnick, L. S., 440  
 Gonzales, E. G., 95, 96, 98-100  
 Gonzalez, M., 167  
 Good, R. A., 137, 235  
 Goodell, B., 242-44  
 Goodell, H., 466  
 Goodhardt, M. J., 329  
 Goodman, L. S., 611  
 Goodwin, F. K., 337  
 Gordon, A., 580  
 Gordon, D. E., 530, 534-37  
 Gordon, J. H., 372  
 Gordon, J. S., 424  
 Gordon, R., 588  
 Gorelick, D. A., 339  
 Gorin, P. D., 210, 211, 217, 222  
 Gorman, J., 91  
 Gorman, R. R., 481, 487  
 Gornski, R. A., 314  
 Gorter, E., 32  
 G  thert, M., 10, 11, 13, 15, 17  
 Goth-Goldstein, R., 400  
 Gothoni, G., 473  
 Gotshall, R. W., 277  
 Gottfried, W., 53  
 Gottlieb, M., 242  
 Gougoux, A., 269, 270, 272, 274, 278, 279  
 Gould, N. P., 267  
 Goyer, P., 584  
 Grace, A. A., 369  
 Graf, K. J., 306  
 Grafe, P., 182, 183  
 Graham, D. G., 513-15, 524, 528, 531-33  
 Graham, J. R., 465  
 Graham, L. T. Jr., 167, 191  
 Graham, P. J., 84, 87  
 Graham, P. R., 530, 534-37  
 Grahame-Smith, D. G., 374  
 Graham-White, J., 330  
 Gralla, E. J., 156  
 Grandison, L., 309  
 Granstr  m, E., 481, 490  
 Grant, L. D., 340-42  
 Grantham, J., 481, 498  
 Graveleau, J., 584  
 Gravovac-Leposavid, L., 585  
 Graw, R. G., 242  
 Gray, J. A., 333  
 Greaves, M. F., 235, 236  
 Green, A. R., 374  
 Green, D., 580  
 Green, M. T., 338  
 Green, M. W., 92, 93  
 Green, N., 273, 275, 282, 284  
 Green, S., 393  
 Greenberg, D. A., 358, 359  
 Greenberg, L. H., 363  
 Greenberg, S., 365, 366  
 Greene, F. E., 579, 587  
 Greene, L. A., 208, 209, 215, 216, 221  
 Greengard, P., 76  
 Greenlee, D., 90  
 Greenough, W. B., 75  
 Greenough, W. T., 326, 347  
 Greenwood, F. C., 116  
 Greer, M. A., 306  
 Gregg, E. C., 588  
 Greibrokk, T., 307, 309  
 Grendel, F., 32  
 Grevon, H. M., 334  
 Grever, M. R., 239  
 Griesemer, R. A., 135  
 Griffin, A. C., 395, 397, 398  
 Griffiths, E. C., 300  
 Grimley, P. M., 67  
 Gripenberg, J., 86  
 Grob, D., 511  
 Grobecker, H., 469  
 Grodzinska, L., 498  
 Groppetti, A., 166  
 Gros, C., 371  
 Grose, W., 88  
 Gross, C., 284  
 Gross, P., 147  
 Grover, P. L., 396  
 Groves, P. M., 370  
 Grubbs, R. D., 179, 180  
 Gruber, C. M., 92, 93  
 Grunberg, E., 130  
 Grund, W., 84, 85  
 Gryglewski, R. J., 479, 481, 487, 495, 498  
 Gudelsky, G. A., 309, 312, 370  
 Guengerich, F. P., 437, 452  
 Guenther, T. M., 134, 157, 438, 440-43, 445, 446, 452, 453  
 Guidotti, A., 91, 183  
 Guillemin, R., 302, 304, 306, 307  
 Guilmette, R. A., 34  
 Guim  res, S., 10, 21  
 Guivernau, M., 483  
 Guiley, R. L., 187, 190  
 Gumucio, J., 354, 356  
 Gundersen, R. W., 215  
 Gupta, S., 235  
 Gurmet, F. C., 242  
 Guroff, G., 206-8, 218  
 Gurtoo, H. L., 134, 448, 453  
 Gussin, R. Z., 269, 272, 274  
 Gustafson, J. A., 310, 438  
 Guth, L., 516, 517  
 Guth, S., 333  
 Gutman, A. B., 278  
 Gutman, Y., 16  
 Gutmann, H. R., 440  
 Guzelian, P. S., 437, 440  
 Gyorgy, P., 583  
 H  
 Hachinski, V., 466  
 Hackett, J. T., 89  
 Hackett, R. B., 440  
 Haddox, M. K., 501  
 Hadh  zy, P., 13, 14  
 Haefely, W., 176  
 Hags, T., 253, 255, 256  
 Hagemann, M. H., 499  
 Hagen, T. C., 306  
 Hager, H., 584  
 Hager, R. N., 582  
 Hagiwara, A., 408

- Hagbin, M., 244, 245  
 Haidamou, M., 183, 184  
 Haigler, H. J., 467  
 Hailstone, M. H., 170  
 Haimovich, J., 119  
 Hajjar, J. H., 41  
 Hakkarainen, H., 473  
 Halaris, A. E., 467  
 Halasz, B., 314  
 Halberg, F., 443  
 Hald, J., 575, 576, 582, 583  
 Haldeman, S., 174, 185  
 Haley, T. J., 84  
 Hall, J. G., 172-76, 180, 185  
 Hall, L., 582  
 Hall, P. V., 191  
 Hall, R., 301  
 Hall, R. L., 393, 394  
 Hallett, M. B., 68, 70, 76  
 Halpern, F. S., 368  
 Halstead, D. C., 208, 214  
 Ham, E. A., 501  
 Hamberg, M., 277, 479, 481, 483, 487  
 Hamberger, A., 168, 187, 189  
 Hamberger, A. C., 167, 189  
 Hambley, J., 332  
 Hamilton, S., 425, 426  
 Hammarström, S., 74, 479-81  
 Hammerling, G. J., 126  
 Hammerskjöld, S., 575  
 Hammond, B., 449  
 Hammond, E. C., 133, 146  
 Hammond, G. D., 235  
 Hammons, A. S., 135, 141-43  
 Hamon, M., 11, 366, 467  
 Hanano, M., 39  
 Hanawalt, P. C., 401  
 Hanby, J., 584  
 Hanchar, A. J., 492  
 Handovsky, H., 583  
 Handeschumacher, R. E., 91  
 Hanington, E., 464  
 Hannam, R. V., 91  
 Hansch, C., 36, 44, 45, 53, 84  
 Hansen, D., 513  
 Hansen, J., 307, 309, 587, 588  
 Hansen, J. J., 172, 176  
 Hansen, L. G., 531, 532  
 Hansmann, G., 425  
 Hanson, G. R., 217  
 Hansson, L., 284  
 Hansson, R., 437  
 Hanzlik, R., 577, 588, 589  
 Hara, K., 400  
 Harada, N., 433  
 Hardebo, J. E., 465, 471, 472  
 Harden, T. K., 361-63, 380  
 Hardisty, R. M., 234-36  
 Hardy, J. A., 171  
 Harik, S. I., 377  
 Harmison, G. G., 167  
 Harma, H. H., 10-12  
 Haroun, L., 400  
 HARPER, G. P., 205-29;  
 205-7, 209, 211  
 Harrop, K. R., 241  
 Harrill, J. A., 281  
 Harris, C., 38  
 Harris, C. C., 136, 140, 158  
 Harris, L., 610  
 Harris, L. C., 335  
 Harris, P. N., 4  
 HARRIS, R. A., 83-111; 85-87,  
 89, 102, 103  
 Harris, R. N., 440  
 Harris, S. J., 449  
 Harris-Warrick, R. M., 216  
 Hársing, L. G., 11, 12  
 Hart, F. D., 482  
 Hart, M., 272  
 Hart, T., 218, 219  
 Hartmann, J. R., 240  
 Hartree, E., 580  
 Harvey, A. M., 511  
 Harvey, E. N., 32  
 Harvey, S. C., 84  
 Harwood, J. P., 251  
 Hashimoto, Y., 400  
 Hashimoto-Yutsudo, C., 436,  
 438, 453  
 Hassan, A., 515  
 Hassan, H. M., 586  
 Hassancin, R. S., 464, 472  
 Hassid, A., 497  
 Hassinen, I., 586  
 Haessler, R., 189  
 Hata, F., 376  
 Hatanaka, H., 206, 208, 209,  
 220  
 Hatfield, G. M., 588  
 Hattori, T., 341  
 Haug, P., 189  
 Haugen, D. A., 436, 445, 453  
 Haug, C. M., 277, 279, 284  
 Hauschka, T. S., 448  
 Hauser, S., 448  
 Hautefeuille, A., 393, 399  
 Hayashi, O., 432, 483  
 Haycock, J. W., 88, 340, 344  
 Hayes, W. J. Jr., 522-24, 528,  
 530, 532, 534, 536  
 Hazum, E., 299, 301  
 Head, B., 440  
 Hendley, P. M., 167, 168, 172,  
 174, 176, 179, 181, 184,  
 185, 191  
 Heal, D. J., 374  
 Hearn, C. E. D., 530  
 Hebb, D. O., 324  
 Hedqvist, P., 9, 10, 12, 482,  
 498, 502  
 Heidelberger, C., 395, 402, 443  
 Heider, C., 284  
 Heinemann, H. O., 278  
 Heinze, W. J., 363  
 Held, E., 494  
 Helfand, S. L., 215  
 Hellenbrecht, D., 469  
 Hellerman, L., 580, 581  
 Henderson, F. G., 4  
 Henderson, G., 10  
 Hendricks, H. H. L., 333  
 Hendry, I. A., 206, 208-12,  
 214, 216, 217, 220-22  
 Henke, T. E., 190  
 Henney, C. S., 74, 75  
 Henrich, W. L., 277  
 Henrickson, K.-G., 464  
 Henry, C. J., 157  
 Henry, J. L., 608  
 Henry, M. C., 149  
 Henschler, D., 412, 512, 514,  
 534-37  
 Hepner, G., 554, 556  
 Herbst, R., 277  
 Herin, R. A., 513, 514  
 Hermes, M., 184  
 Hermoni, M., 364  
 Hern, J. E. C., 513, 515  
 Herndon, R. M., 190  
 Hernosa, S., 340  
 Herrup, K., 207, 208, 216, 217  
 Hertting, G., 10-13  
 Hertz, L., 166-68, 170, 187  
 Hertz, M., 471  
 Héry, F., 11  
 Héry, M., 312  
 Herz, A., 10, 12, 15, 21, 377,  
 379, 380  
 Herz, M. J., 324  
 Hess, M. E., 362  
 Hess, R., 556, 559  
 Heubel, F., 440  
 Heveran, J., 130  
 Hewitt, J., 126  
 Heydorn, W., 363  
 Hickman, R., 242, 243  
 Hicks, R. M., 408  
 Hicks, T. P., 172-76, 180, 185,  
 189, 190  
 Hidmark, A., 150  
 Hieble, J. P., 10  
 Higgins, A. J., 11, 16  
 Higgs, G. A., 482, 495  
 Higuchi, W. I., 36, 38  
 Hildebrandt, A. G., 434  
 Hiley, C. R., 329  
 Hill, C. E., 208, 209  
 Hill, C. W., 338  
 Hill, D. L., 140  
 Hill, D. R., 10, 11, 18, 170  
 Hill, L. E., 401  
 Hill, R. G., 185, 191  
 Hiller, J. M., 379  
 Hillhouse, E., 314  
 Hilliard, J., 311  
 Hillyard, S. A., 335  
 Hilton, B. P., 469



## 626 AUTHOR INDEX

- Himes, D. L., 281  
 Himwich, H. E., 582  
 Hine, C. H., 530, 534, 535, 538, 539, 588  
 Hingson, D. J., 48  
 Hinman, J. W., 481, 497  
 Hinojosa, R., 281  
 Hinterberger, H., 464  
 Hirano, S., 168  
 Hirata, A., 14  
 Hirata, F., 72, 73  
 Hirono, I., 395  
 Hirota, N., 407  
 Hirsch, G. P., 400, 401, 403  
 Hirsch, M. J., 329  
 Hitchcock, S., 235, 236  
 Hitri, A., 367, 370  
 Hitzemann, B. A., 101, 379  
 Hitzemann, R. J., 101, 102, 379  
 HJELMELAND, L. M., 431-62, 440, 442, 449, 451, 453  
 Ho, B. T., 370  
 HO, I. K., 83-111; 87, 90, 93-96, 98-101  
 Ho, N. F. H., 36, 38  
 Ho, W., 242  
 Hochman, J., 252  
 Hodge, H. C., 515  
 Hodgson, E., 440  
 Hodson, C. A., 310  
 Hoff, E. C., 576, 582  
 Hoffbrand, A. V., 235  
 Hoffer, B. J., 345  
 Hoffman, A., 467  
 Hoffman, B. B., 358, 362, 380  
 Hoffman, E. J., 9  
 Hoffman, F., 9  
 Hoffman, G., 298  
 Hoffman, M., 372  
 Hoffman, P. L., 98, 100, 101, 371  
 Hoffmann, D., 146  
 Hoffmann, E. M., 102  
 Hoffmann, I., 11  
 Hoffmann, L. M., 53  
 Hogben, C. A. M., 34  
 Hogenboom, F., 10, 14  
 Hogetveit, A. C., 151  
 Hogue-Angeletti, R. A., 205-7  
 Hökfelt, T., 21, 90, 303, 311, 333  
 Holaday, D. A., 133  
 HOLCENBERG, J. S., 231-49, 245  
 Holgate, S. T., 76  
 Holiman, B. J., 235  
 Hollaender, A., 393  
 Holland, D. T., 300  
 Holland, J. F., 231, 239  
 Holland, P., 514, 524-28, 530, 532  
 Hollander, C. S., 272, 314  
 Hollemans, H. J. G., 493  
 Hollenberg, N. K., 489  
 Hollifield, J. W., 271, 277, 495  
 Hollingshaus, J. G., 523, 528, 531, 532  
 Hollingsworth, P. J., 359  
 Hollingsworth, R. G., 168  
 Hollins, C., 12  
 Hollinshead, W. H., 310  
 Hollister, L. E., 330, 331  
 Hollstein, M., 393, 399, 403  
 Holtt, V., 379  
 Holman, R. E., 280  
 Holmes, S. W., 473  
 Holmstead, R. L., 515  
 Holmstedt, B., 511  
 Holowka, D., 65  
 Holtman, J. R. Jr., 89  
 Holtz, W. J., 267  
 Holzgreve, H., 277  
 Holzman, N., 341  
 Homma, S., 191  
 Hong, S. L., 483  
 Hongard, K., 471  
 Honoré, T., 172, 176  
 Hood, W. F., 87, 89, 102, 103  
 Hoogland, D. R., 440  
 Hook, J. B., 271, 277  
 Hooper, F., 300  
 Hooper, K. C., 300  
 Hope, W., 10  
 Hopkins, A., 585  
 Hoppe, R. T., 242  
 Hori, N., 190  
 Hori, R., 35  
 Horii, Z.-I., 215, 216  
 Horita, A., 371  
 Horn, A. S., 10  
 Horn, G., 332, 348  
 Horn, K. L., 281  
 Hornbrook, M. M., 64  
 Hornig, J. S., 379  
 Hornykeiwicz, O., 370  
 Horrobin, D. F., 473  
 Hosel, H., 536  
 Hüsi, E., 167, 168, 181, 187  
 Hüsi, L., 167, 168, 181, 187  
 Hotsen, J. R., 584  
 Hotsen, R. D., 512  
 Hottinger, A., 518  
 House, R. F., 344  
 Houston, J. B., 35, 36, 38, 45  
 Houston, L., 134  
 Howard, J. L., 340-42  
 Howard, S. M., 42  
 Howe, P. R., 138, 140  
 Howell, K. E., 554, 556  
 Howitt, G., 471  
 Howlett, A. C., 252-55, 257  
 Howlett, D. R., 369  
 Hruska, R. E., 372, 376, 377  
 Hsiao, W. L., 91  
 Hsie, A. W., 400, 401, 403  
 Hsieh, A. J. W., 301, 302  
 Huang, L.-Y. M., 88, 89  
 Huang, M.-T., 437  
 Huang, Y. H., 360  
 Hubbard, T. F., 93  
 Hubbard, W. C., 271  
 Huberman, E., 400, 401  
 Hudson, A. L., 10, 11, 18, 170  
 Hudson, W. R., 281  
 Hueper, W. C., 151  
 Huffman, R. D., 95, 96, 98, 99, 174, 185  
 Huggins, C. B., 407  
 Hughes, J., 10, 380  
 Hughes, J. P. W., 534-36  
 Hugon, J., 554, 556  
 Hulme, E. C., 375  
 Humes, J. L., 501  
 Humphrey, B., 235  
 Humphrey, P. P. A., 10  
 Humphrey, R., 301  
 Hunt, C. C., 517  
 Hunt, K., 169, 172-74, 176, 180, 181, 184, 185, 191  
 Hunier, B., 339  
 Hunter, D., 512, 535, 537  
 Hunter, W. M., 116, 117, 123  
 Huppert, F. A., 346  
 Huppler, R. E., 380  
 Hurst, P. M., 344  
 Husaini, M., 471  
 Hustu, H. O., 231, 233  
 Hutchinson, G. B., 174  
 Hutchinson, J. C., 284  
 Huth, H., 11, 15, 17  
 Hwang, B. Y., 270, 279  
 Hylden, J. L., 148, 150  
 Hyman, A. L., 496, 498  
 Hyman, J., 400  
 Hynes, M., 368  
 Hynes, M. D., 372  
 Hyttel, J., 367  
 Hyypä, M. T., 468  
 I  
 Ibeta, Y., 297, 298  
 Iber, F., 588  
 Ichihara, K., 120  
 Ichishita, H., 183  
 Ieiri, T., 312  
 Iino, Y., 276  
 Illiceto, A., 577  
 Illes, P., 10, 12, 15  
 Illis, L., 516, 517  
 Illner, P., 303  
 Imadia, K., 408  
 Imai, M., 276  
 Imai, Y., 434, 436, 438, 453  
 Imbs, J. L., 277  
 Imhof, P., 440  
 Immel, H. R., 157  
 Imura, H., 302, 313  
 Inagami, T., 277, 495

Ingram, L. O., 102  
 Inman, V. T., 18  
 Insel, P. A., 252-56  
 Irokawa, N., 482  
 Irwin, P., 335  
 Isaacson, R. L., 334  
 Isabell, H., 93, 95, 96  
 Ise, I., 281-83  
 Ishizaka, K., 63, 64, 66-68, 72, 73  
 Ishizaka, T., 64, 66-68, 72, 73  
 Ishizaki, C., 450  
 Israel, Y., 88, 89  
 Itagaki, E., 435, 436  
 Ito, A., 554, 556  
 Ito, N., 408  
 Ito, S., 552  
 Ito, T., 482  
 Ito, Y., 136  
 Itskovitz, H. D., 494, 498, 500  
 Iversen, L. L., 11, 12, 18, 170, 209-11, 214, 221, 369, 370, 606, 607  
 Iversen, S. D., 12, 334, 341  
 Iwasa, J., 45  
 Iwasaki, Y., 302  
 Iwatubo, K., 14  
 Iyer, C. G. S., 512  
 Izquierdo, I., 338

J

Jackisch, R., 10-13  
 Jackson, D. M., 360, 361, 370, 376  
 Jackson, F., 140  
 Jackson, I. M. D., 305  
 Jackson, P., 124  
 Jackson, R. C., 241  
 Jacob-Mueller, U., 424  
 Jacobowitz, D., 219  
 Jacobs, B. L., 374  
 Jacobs, H. S., 124  
 Jacobs, J. B., 408  
 Jacobsen, E., 575, 576, 582, 583  
 Jacobson, H. R., 274, 275  
 Jacobson, R. A., 528, 532  
 Jacoby, J. H., 467  
 Jaffe, B. M., 114, 125  
 Jaffe, E. A., 484  
 Jaffe, J. H., 93, 95, 96  
 Jaffe, J. J., 91  
 Jafferji, S. S., 71  
 Jain, A. K., 279, 280  
 Jakoby, W. B., 433  
 Jakachuk, B. A., 73, 74  
 Jakubowski, M., 579  
 JAMASBI, R., 133-63, 137  
 James, K. A. C., 521  
 James, M. F., 512  
 Jandali, M. K., 337  
 Janig, G.-R., 433

Janossy, G., 235, 236  
 Janowsky, D., 344  
 Jansson, S. E., 86  
 Janthur, B., 440  
 Janzik, H. H., 516, 517  
 Jarabak, J., 272  
 Jarvik, M. E., 335, 339  
 Jasper, H. H., 189  
 Jawahir, T. L., 368  
 Jecker, L., 154  
 Jefcoate, C. R., 443  
 Jeffcoate, S. L., 118, 300, 333  
 Jeffery, J. J., 33  
 Jellinck, P. H., 447  
 Jenner, P., 367  
 Jensen, D. K., 305, 309  
 Jensen, H., 3  
 Jensen, N. M., 440-45, 452  
 Jensen, R. A., 335, 338, 340, 343, 347  
 Jenssen, D., 393  
 Jerina, D., 446  
 Jerram, T., 330  
 Jessell, T. M., 11, 12, 18  
 Jhamandas, K. H., 12  
 Jobin, M., 302  
 Johannsen, F. R., 530, 534-37  
 Johannson, V., 464  
 Johansen, T., 67  
 Johansson, B., 117  
 Johansson, N. G., 300  
 Johansson, O., 21, 303, 311, 333  
 John, G., 102  
 Johns, T. R., 89  
 Johnson, A., 331  
 Johnson, A. R., 75  
 Johnson, B. C., 512  
 Johnson, B. L., 512  
 Johnson, E. F., 436, 445  
 JOHNSON, E. M., 417-29; 210, 211, 217, 222, 424-26  
 Johnson, E. M. Jr., 209, 214, 220-22  
 Johnson, E. S., 11, 13, 301  
 Johnson, F. L., 241, 242, 244  
 Johnson, G., 330  
 Johnson, G. E., 210-13  
 Johnson, G. L., 251-58, 261  
 Johnson, H., 524  
 Johnson, J. A., 277  
 Johnson, J. L., 165-67, 170  
 Johnson, K. O., 400, 403  
 Johnson, M. K., 512, 514, 519, 522-24, 527, 529-37  
 Johnson, R. A., 487  
 Johnston, C. D., 577  
 Johnston, G. A. R., 9, 87, 166, 167, 169, 170, 172, 175, 177, 180, 181, 184, 187, 188  
 Johnstone, E. C., 370  
 Jollow, D. J., 33, 395

Jonas, H. A., 301  
 Jones, A. L., 554, 556  
 Jones, A. W., 171-76, 184, 185, 191  
 Jones, B. E., 467  
 Jones, C. B., 278  
 Jones, D. L., 341  
 Jones, G. L., 91  
 Jones, K. G., 554, 556  
 Jones, L. G., 271  
 Jones, L. M., 71  
 Jones, M. T., 314  
 Jones, R. L., 501  
 Jonsson, G., 311  
 Jordan, C. C., 191  
 Joseph, B. S., 520  
 Jukofsky, D., 130  
 Jung, R., 440  
 Jungermann, K., 554, 556  
 Jutisz, M., 297

K

Kadlec, O., 12  
 Kadowitz, P. J., 496, 498  
 Kafka, M. S., 368  
 Kagan, F., 36  
 Kagayama, M., 69  
 Kahl, G. F., 441-43, 446, 452, 453  
 Kahl, R., 440  
 Kahn, E. J. Jr., 4  
 Kakari, S., 208, 211, 212  
 Kakemi, K., 35, 40, 42, 43  
 Kalant, H., 88, 94, 582  
 Kaley, G., 473, 492, 500, 502  
 Kaliner, M., 75, 76  
 Kalinowsky, L. B., 96  
 Kalman, S. M., 432  
 Kalra, S., 299  
 Kalsner, S., 10, 19, 20  
 Kaluskar, R., 310  
 Kamal, L., 12, 19  
 Kamataki, T., 437  
 Kambayashi, J., 283  
 Kamberi, I. A., 309-12  
 Kaminsky, I. S., 440  
 Kamp, C. W., 90  
 Kanagasantharam, R., 513, 515, 517, 526, 527  
 Kanda, M., 303  
 Kandel, E. R., 325, 332  
 Kaneko, Y., 281  
 Kanellopoulos, J., 65  
 Kanematsu, S., 311  
 Kaneno, S., 367  
 Kang, S., 440  
 Kang, Y.-H., 447  
 Kangasniemi, P., 468  
 Kannegiesser, H., 490  
 Kanno, T., 67  
 Kanter, D., 191  
 Kanter, P., 448

## 628 AUTHOR INDEX

- Kapeghian, J. C., 440  
 Kaplan, H. S., 242  
 Kaplan, S., 425  
 Kapp, B. S., 338, 340, 347  
 Karam, J. H., 51  
 Karbe, E., 149  
 Kardon, F., 304, 305  
 Karler, R., 84  
 Karnofsky, D. A., 430  
 Karnovsky, M. L., 515, 517  
 Karobath, M., 378  
 Karppinen, A., 167  
 Kasajima, K., 281  
 Kasalder, J., 577  
 Kaschak, M., 147  
 Kaslow, H. R., 251-54, 258, 260, 261  
 Kasprzak, K. S., 153  
 Kastin, A. J., 296, 297, 335, 338  
 Kastin, H. A., 338  
 Kaswan, J., 335  
 Katagiri, M., 432, 435, 436  
 Katayama, S., 408  
 Katayama, Y., 12, 15  
 Kato, R., 94, 440, 450  
 Kato, Y., 313  
 Katsuki, H., 433  
 Katy, Y., 302  
 Katz, C., 135  
 Katz, D. H., 63  
 Katz, M., 44, 49  
 Katz, N., 554, 556  
 Katzen, D. R., 272  
 Katzenellenbogen, B. S., 449  
 Kauffman, S. L., 142  
 Kaufman, D. G., 136, 140, 149  
 Kaufmann, S., 581  
 Kauker, M. L., 274, 275, 498  
 Kawachi, T., 400  
 Kawai, K., 33  
 Kawalek, J., 452  
 Kawamoto, K., 281, 283  
 Kay, H. E. M., 235  
 Kazmierczak, W., 67  
 Kebrele, H., 440  
 Keefe, E. B., 584  
 Keener, M., 554, 556  
 Keet, J. P., 329  
 Keils, K., 53  
 Keilin, D., 580  
 Keleti, T., 577, 581  
 Kellar, K. J., 359-61, 363, 364, 368, 373  
 Keller, E., 189  
 Keller, H., 468  
 Keller, R. T., 277  
 Kelley, W. N., 278  
 Kelly, A. F., 341  
 Kelly, P. A., 301, 302  
 Kelly, P. H., 189  
 Kemel, M. L., 10, 11, 13, 171  
 Kemp, J. A., 185, 191  
 Kende, A. S., 441, 442, 452  
 Kendrick, J., 135  
 Kennedy, A. R., 151  
 Kennedy, S. M. E., 169, 180, 181, 184  
 Kennerly, D. A., 71, 72  
 Kepkova, B., 336  
 Kerdellu , B., 297  
 Kersey, J., 244  
 Kerus, W. D., 156  
 Kerwin, R. W., 10, 11  
 Kesler, J. A., 208, 210, 212, 214-17, 222  
 Kessler, J. B., 148, 151  
 Kettler, R., 208, 210, 212, 213  
 Kety, S. S., 337, 347  
 Kewenter, J., 469  
 Keyser, G. F., 92, 93  
 Keyser, C. H., 407  
 Khalil, A. Z., 512, 528, 532  
 Khan, M. T., 10  
 Khanna, J. M., 365  
 Kho, B. T., 588  
 Khodr, G. S., 299, 301  
 Khorana, J., 255  
 Khoyi, M. A., 11, 17  
 Kidd, J. G., 512, 516  
 Kiely, C. E., 512  
 Kiessling, K. H., 582  
 K  l, F., 277  
 Kilbinger, H., 11, 13  
 Kilter, M. E., 33  
 Kim, J. C. S., 138, 139  
 Kim, J. S., 189  
 Kim, K. E., 284  
 Kim, M. H., 259  
 Kim, T., 244  
 Kimberg, D. V., 554, 556  
 Kimelberg, H. K., 34  
 Kimura, J., 136  
 Kincaid-Smith, P., 494  
 King, D. P., 242  
 King, J. C., 297, 298, 303, 304  
 King, M. G., 338, 341  
 Kinner, J. H., 487  
 Kinnes, C. G., 515  
 Kinoshita, H., 297, 298  
 Kinoshita, N., 446  
 Kinscherf, D. A., 183  
 Kipnis, D. M., 114, 116, 122  
 Kirpekar, S. M., 10  
 Kirschenbaum, M. A., 271  
 Kirsteins, L., 306  
 Kishimoto, T., 271  
 Kiss, A., 272, 274, 278, 279  
 Kistler, K., 365  
 Kitchen, K. T., 425  
 Kitson, T., 579  
 Kizer, J., 297, 303  
 Kjeldgaard, N., 580  
 Klaassen, C. D., 270, 282  
 Klawans, H. L., 361, 367, 368, 370, 372, 374  
 Klawans, H. L. Jr., 366  
 Kledzik, G. S., 302  
 Klee, W. A., 379, 380  
 Klein, D., 219  
 Klein, D. L., 242  
 Klein, I., 492, 495  
 Klein, N., 425  
 Klein, N. W., 427  
 Kleinhans, A. L., 87  
 Kleinkauf, H., 306  
 Klemm, G., 440  
 Klemm, N., 177  
 Kligman, I. H., 138  
 Klitman, V., 369  
 Klingman, G. I., 206, 210, 211, 213  
 Klingman, J. D., 206, 210, 211, 213  
 Kloene, J., 481  
 Klynsner, R., 368  
 Knigge, K., 298, 301  
 Knight, T. F., 274  
 Knobil, E., 297  
 Knoefel, P. K., 40  
 Knoll, J., 11, 12  
 Knowles, L., 471, 473  
 Knudsen, R., 307, 309  
 Knutsen, B., 584  
 Kobayashi, R., 259  
 Kobayashi, R. M., 300, 376, 377  
 Kobayashi, T., 281  
 Koch, Y., 299, 301  
 Kochhar, D. M., 425  
 Kocsis, J. J., 395  
 Koda, R. T., 51  
 KOEHEL, D. A., 265-93; 266-69, 274, 282, 285  
 Koella, W. P., 10, 20  
 Kohler, G., 126-28  
 Koizumi, T., 35, 40  
 Kokka, N., 375  
 Kokko, J. P., 274-76  
 Kolb, L. H., 148, 149  
 Kolbye, A. C., 395  
 Koller, C. A., 239  
 Koller, W. C., 372  
 Komai, T., 33, 35, 36, 39, 45  
 Komeil, A. A., 513-15, 524, 528, 532, 533  
 Komorn, R., 266  
 Komoto, S., 67  
 Konieczkowski, M., 497  
 Konishi, R., 35  
 Konishi, S., 12, 172  
 Konkol, R. J., 218, 219  
 Kontro, P., 167  
 Koob, G. F., 341  
 Koop, D. E., 436  
 Koopman, W. J., 73  
 Kopecky, J., 585  
 Kopell, B. S., 330  
 Kopin, I., 581

- Kopin, I. J., 10, 14  
 Kopitz, M., 404  
 Koponen, M., 464  
 Koppanyi, T., 92, 93  
 Korach, K. S., 447  
 Kordon, C., 310, 312  
 Korff, J. M., 272  
 Kornetsky, C., 344  
 Kornuth, P. J., 37, 38  
 Koropatnick, J., 399  
 Korzeniowski, D., 436, 437  
 Koster, R., 440  
 Kosterlitz, H. W., 10, 380  
 Kotani, M., 313  
 Kotchen, T. A., 271  
 Kotin, P., 140  
 Koudstaal, J., 554, 556  
 Koujoumdjian, J. C., 183, 184  
 Kouri, R. E., 134, 157  
 Kovacs, G., 336  
 Koyama, I., 189  
 Kraft, E., 10, 17  
 Krasne, F. B., 324, 325  
 Krauchi, K., 374  
 Krsna, H. M. J., 251  
 Krause, S., 588  
 Krnuss, B., 300  
 Krauthammer, N., 449  
 Krebs, H. A., 168  
 Krediet, T. G., 333  
 Kreibich, G., 436  
 Krejci, I., 336  
 Kress, 92  
 Krestynski, R., 554, 556  
 Krezoski, S., 554, 556  
 Krieg, R. J., 311  
 Krieger, D. T., 470  
 Kriek, E., 395, 398, 410  
 Kriech, B., 212, 213  
 Krishnamurti, A., 513, 515  
 Kristensen, M., 587, 588  
 Krivit, W., 240, 244  
 Kriz, N., 182  
 Krnjacic, K., 8, 170, 330  
 Kroc, J., 277, 279, 284  
 Kroes, R., 393, 403  
 Krogsgaard-Larsen, P., 172, 176  
 Krooth, R. S., 91  
 Krulich, L., 302, 303  
 Krumnikl, G., 182, 183  
 Kruse, D., 48  
 Kruss, A., 156, 157  
 Kubo, S., 297, 298  
 Kuczenski, R., 332, 340  
 Kudo, Y., 170, 182, 183  
 Kuehl, F. A. Jr., 482, 501  
 Kuhar, M. J., 14, 99, 177, 180, 379  
 Kuhl, H., 300  
 Kulakis, C., 586  
 Kulczycki, A., 65  
 Kumakura, K., 372  
 Kung, L. S., 361  
 Kung-Cheung, L. S., 361  
 Kuntzman, R., 440  
 Kunze, H., 482  
 Kupfermann, I., 324, 325  
 Kuppers, D., 12  
 Kuriyama, Y., 556, 559  
 Kurlich, L., 297  
 Kuroki, T., 393, 399  
 Kurtz, P., 332, 339  
 Kusakari, J., 281-83  
 Kusano, K., 190  
 Kuschinsky, K., 11, 372  
 Kuschner, M., 156  
 Kuwahara, J., 51  
 Kvale, I., 187, 189  
 Kvetnansky, R., 314  
 Kyle, M. C., 279, 284  
 Kyogoku, Y., 91  
 L  
 Labella, F. S., 21  
 Labrie, F., 301, 302  
 Lachelin, G. C. L., 311  
 Lacher, J. W., 280  
 LaDu, B. N., 556  
 Laforest, J., 268  
 Lagerlöf, B., 396  
 Lähdesmäki, P., 167  
 Lahti, R. A., 359, 362  
 Lai, H., 371  
 Lebe, R. S., 412  
 Lakowicz, J. R., 148, 150  
 Lakshmanan, J., 208  
 Lal, H., 368, 372, 376  
 Lal, S., 372  
 Lam, G. F. M., 91  
 Lam, P., 399  
 Lam, Y., 307, 309  
 Lamarche, M., 588  
 Lambert, C., 424  
 Lambert, G. A., 466  
 Lambert, H. J., 53  
 Lambert, J. D. C., 177, 181-83  
 Lambotte-Vandepuer, M., 440  
 Lamont, D. M., 215  
 Lamour, Y., 176  
 Lamprecht, S. A., 301  
 Lampson, L. A., 126  
 Lamy, P. P., 33  
 Lancaster, C., 492  
 Lance, J. W., 463-65, 471-73  
 Landsteiner, K., 65  
 Lang, M., 587, 588  
 LANG, M. A., 431-62; 435, 440, 442, 444, 449, 451-53  
 Langard, O., 277  
 Langs, H. H., 494  
 Langer, G., 368  
 Langer, S. Z., 7, 10-12, 14, 16, 19, 20, 359, 364, 373, 609  
 Langley, L. R., 281  
 Langseth, L., 153  
 Langston, J. W., 584  
 Långvik, V. A., 468  
 Lapetina, E. G., 483  
 Laplante, E., 312  
 Lapp, R. L., 528, 532  
 Laragh, J. H., 278  
 Larrabee, M. G., 208, 214  
 Larsen, T., 278  
 Larsen, V., 575, 583  
 Larson, C., 97, 98, 272, 277, 376, 488, 493, 494  
 Larson, I., 469  
 Lashley, K. S., 325  
 Lasker, J., 515  
 Laskin, S., 156  
 Laties, V. G., 344  
 Lau, K., 273, 279  
 Lauer, S. J., 235, 237  
 Lauler, D. P., 271  
 Lavallée, M., 10  
 Lawrence, A. M., 306  
 Lawrence, D. K., 86  
 Lawrence, G. L., 53  
 Lawson, D., 67  
 Lawton, A. R., 237  
 Lawton, N. F., 124  
 Lazarus, K. J., 209  
 Leach, B. E., 497  
 Leavitt, J. L., 328  
 LeBlanc, A. E., 94  
 LeBlanc, H., 311  
 LeBlanc, R., 37, 38  
 Le Boeuf, A., 337  
 Lech, J. J., 445  
 Lecoite, P., 439, 440  
 Ledingham, J. G. G., 273, 278  
 Lee, A. G., 85, 86  
 Lee, E. H., 64  
 Lee, H., 425  
 Lee, H. M., 4  
 Lee, I. P., 233, 425, 438  
 Lee, J. B., 481, 486, 488, 490  
 Lee, M. O., 5  
 Lee, P. N., 134  
 Lee, S. T., 512  
 Lee, T., 14, 370  
 Lee, T. B., 74  
 Lee, T. F., 11  
 Lee, W. H., 488, 491, 496  
 Lees, S., 124  
 LeFevre, P. A., 393, 394, 402, 403  
 LeFevre, P. G., 33  
 Lefevre-Borg, F., 19  
 Lefkowitz, R. J., 251, 254, 358, 362, 380  
 Le Floch, M. L., 10, 13  
 Legator, M. S., 393, 394, 399  
 Legraverend, C., 433  
 Legros, J. J., 337  
 LeGuern, G., 126, 127  
 Leifer, Z., 400

## 630 AUTHOR INDEX

- Lelievre, G., 280  
 Lemaire, J., 252  
 Lemelin, M. A., 440  
 Lemieux, G., 269, 270, 272, 274, 278, 279  
 Lemke, H., 126  
 Lemmer, B., 469  
 Lenhoff, H. M., 425  
 Lentz, T. L., 425  
 Leo, A. J., 36, 44, 45  
 Leonard, B. E., 95, 96  
 Leonetti, G., 284  
 LePage, M., 585  
 Lepitz, R. L., 424  
 Lepoutre, E., 280  
 LeQuenne, P. M., 584, 585  
 Lerario, A. C., 117  
 Lerner, K. G., 241-43  
 Lesca, P., 439, 440  
 Leshner, A. I., 336  
 Leslie, S. W., 86, 87, 89, 102  
 Letourneau, P. C., 215  
 Lettieri, D. J., 610  
 Leung, F. C., 306  
 Leung, H., 371  
 LeVay, S., 517  
 Levey, G. S., 492, 495  
 Levey, R. L., 242  
 Levi, G., 10, 367  
 Levi-Montalcini, R., 205-13, 215-22  
 Levin, H. S., 329  
 Levin, N., 235  
 Levin, N. W., 471  
 Levin, W., 433, 436-38, 440, 452  
 Levine, G., 368  
 Levine, L., 272, 473, 483, 489, 497  
 Levine, M. A., 252, 258, 260  
 Levine, R. R., 37, 38  
 Levine, S., 333  
 Levinskaya, G. J., 530, 534-37  
 Levitan, H., 52  
 Levitt, D. S., 440, 448  
 Levitt, M., 581  
 Levitt, R. C., 440, 448  
 Levy, F. H., 585  
 Levy, L., 134  
 Levy, R., 126  
 Levy, W. B., 88  
 Lew, J. Y., 369  
 Lewey, F. H., 585  
 Lewis, J. A., 554  
 Lewis, M. E., 218, 219  
 Lewis, R. A., 76  
 Lewis, W. H., 34  
 Ley, B. W., 148, 151  
 Ley, K. D., 102  
 Laysen, J. E., 367  
 Lhermitte, F., 330  
 Li, T., 580  
 Liang, K. C., 338, 343  
 Liao, J. C., 17  
 Lichtenstein, L. M., 63, 67, 70, 74-76  
 Lichtsteiner, M., 374  
 Liddon, S. C., 585  
 Lieber, C. S., 440, 582  
 Liebenkind, J. C., 338  
 Liebmann, J. E., 463, 466  
 LIEN, E. J., 31-61; 31, 33-41, 43, 45, 46, 48-51, 53, 55  
 Lifschitz, M. D., 271, 277  
 Lijinsky, W., 141  
 Liljequist, S., 371  
 Lillie, R. D., 512, 513, 515-17, 519  
 Limbird, L. E., 251, 254  
 Lin, E. C. C., 126, 127  
 Lin, M. C., 251  
 Lin, M. T., 473  
 Lin, S. K., 56  
 Lincoln, D. W., 12  
 Lindgaard, K-F., 473  
 Lindeman, R. D., 284  
 Linder, M., 182, 183  
 Linderholm, H., 577, 588, 589  
 Lindmar, R., 9  
 Lindner, H. R., 301, 473  
 Lindvall, L., 464  
 Ling, N., 302  
 Lingiswerde, O., 469  
 Linnoila, I., 585  
 Lipton, M., 582  
 List, S. J., 367, 369  
 Lister, T. A., 235  
 Little, C., 447  
 Little, J. B., 151  
 Littleton, J. M., 102  
 Litwin, J., 396  
 Liveing, E., 465  
 Livingston, R. B., 337, 347  
 Ljung, B., 10  
 Ljungdahl, A., 21, 333  
 Llorens, C., 14, 18, 366, 371  
 Lloyd, D. H., 87  
 Lloyd, J. W., 133  
 Lo, L., 399  
 Lock, S., 145  
 Lodge, D., 84, 87, 167, 169, 172-77, 185, 191  
 Lodge, J., 337  
 Loeb, L. A., 404  
 Löffelholz, K., 9, 10  
 Löfstrom, A., 311  
 Logan, W. F. W. E., 471  
 Loh, H. H., 87, 93, 95, 96, 101, 102, 379  
 Lohmüller, G., 279  
 Lokhandwala, M. F., 10, 19, 21  
 Lombard, L. S., 407  
 Lombroso, L., 440  
 London, E. D., 177, 180  
 Londres, C., 251  
 Longden, A. J., 370  
 Longstaff, E., 393, 394, 402, 403  
 Longworth, O. R., 512, 516  
 Lonigro, A. J., 482, 486, 488-90, 493, 498, 499  
 Loomis, W. F., 425  
 Lord, G. D. A., 465  
 Lord, J. A. H., 380  
 Lord, R. C., 91  
 Lorot, C., 512, 536  
 Losa, G., 554  
 Losey, E. G., 367  
 Lothman, E. W., 182  
 Loud, A. V., 554, 556  
 Louis, W. J., 12  
 Low, P. S., 87  
 Lowell, R., 425  
 Lowndes, H. E., 518  
 Lowry, O. H., 167, 191  
 Loynning, E., 277  
 Lu, A. Y. H., 433, 437, 440, 452  
 Lu, K., 300  
 Ludden, C. T., 471  
 Ludens, J. H., 273, 274  
 Ludlow, C., 344  
 Luft, R., 303  
 Lugnier, C., 467  
 Luke, R. G., 271  
 Lundberg, J. M., 21, 333, 469  
 Lundborg, P., 367  
 Lund-Carlson, R., 189  
 Lunden, F. E. Jr., 133  
 Lundin, H., 464  
 Lund-Johansen, P., 284  
 Lundwall, L., 582  
 Luse, S. A., 215  
 Luis, A. J., 448  
 Lutz, J., 96  
 Lutzky, H., 327  
 Luzio, N., 584  
 Lydlin, H., 279  
 Lynch, G., 177, 178, 190  
 Lynch, G. S., 189, 190  
 Lyness, W. H., 84, 95  
 Lyon, E. S., 433  
 Lytle, C. R., 447  
  
 M  
 Maas, J. W., 467  
 Maas, A. R., 268-70, 272-74, 278, 279  
 Mabuchi, E. L., 133  
 McCabe, E. S., 582  
 MacDermot, V., 516, 517  
 MacDonald, J. F., 177  
 MacDonald, R. L., 83, 88  
 MacDonnell, P. C., 208  
 MacFarlane, D. J., 45, 47  
 Machanoff, R., 400, 401, 403  
 Macht, D. I., 3  
 Macia, R. A., 209, 220, 221

- Mackay, A. V. P., 370  
 MacKenzie, E. T., 472  
 MacKinnon, A. M., 440  
 MacLeod, L. D., 583  
 MacLeod, R. M., 307, 309  
 Maggi, A., 359-62, 364, 373, 374, 377, 378  
 Magruder, C., 179  
 Maguire, M. E., 251, 253-56  
 Mahaffee, C., 93  
 Mahler, H. R., 85  
 Maickel, R. P., 359, 362  
 Mailman, R. B., 218, 219  
 Mair, R., 345  
 Majchrowicz, E., 582  
 Majerus, P. W., 484  
 Majewski, H., 10, 19, 21  
 Majno, G., 515, 517  
 Major, L., 581, 584  
 Makinodan, T., 136  
 Makous, W. L., 371  
 Malaveille, C., 393, 399  
 Malejka-Giganti, D., 440  
 Malik, K. U., 10, 482, 491, 493, 496, 498, 502  
 Malkinson, A. M., 440  
 Malling, H. V., 121  
 Malmo, R. B., 335  
 Malmsten, C., 481  
 Malone, J. C., 512, 529  
 Maloney, A. J. F., 329  
 Malupes, L., 239  
 Malta, E., 11  
 Malthé-Sørensen, D., 187, 189, 190  
 Mandel, P., 93, 166  
 Mandell, A. J., 361, 370  
 Manganiello, V. C., 501  
 Manier, D. H., 363  
 Mannaioni, P. F., 76  
 Mantering, G. J., 450  
 Mannisto, P., 314  
 Manno, B. R., 283  
 Manno, J. E., 283  
 Manrique, E., 179, 181  
 Mansuy, D., 439, 440  
 Mantegazza, P., 313  
 Mantione, C. R., 372  
 Mantle, P. G., 171  
 Mao, C. C., 377  
 Marais, H., 367, 371, 372  
 March, R. B., 515  
 Marchand, G. R., 271  
 Marchok, A. C., 145  
 Marchow, L., 153  
 Marco, E., 377  
 Marcucci, F., 166  
 Marcus, R. J., 304, 305  
 Mardones, J., 582  
 Margolis, S., 75  
 Mart, J., 166  
 Mark, L. C., 94  
 Markee, J. E., 310  
 Markey, K., 210, 211, 217  
 Markham, J. D., 582  
 Markowitz, D., 90  
 Markwardt, F., 467  
 Marnela, K.-M., 167  
 Marniemi, J., 440  
 Marcin, M., 427  
 Marone, G., 74, 75  
 Maroske, D., 277  
 Marotta, J., 370  
 Marquardt, D. L., 75  
 Marrujo, D., 340  
 Marsden, C. D., 367  
 Marselos, M., 587, 588  
 Marsh, S., 177, 178  
 Marshall, A. C., 52  
 Marshall, G., 297  
 Marshall, K. C., 174, 181, 185  
 Marshall, S., 312  
 Marslen-Wilson, W. D., 346  
 Martel-Planche, G., 393, 399  
 Martensen-Larsen, O., 585  
 Martin, B. R., 251  
 Martin, D. H., 135, 147, 148, 153-55  
 Martin, I. L., 10-12, 19  
 Martin, J. B., 302, 303, 306, 313  
 Martin, J. E., 312  
 Martin, M. R., 172-74, 179, 184, 185, 188, 190, 191  
 Martin, W. R., 380  
 Martinez, A. A., 10  
 Martinez, J. L., 335, 338, 340, 343, 347  
 Martinez, J. R., 360  
 Martinez-Maldonado, M., 277  
 Martinez-Rodriguez, R., 167  
 Martres, M.-P., 361, 366, 367, 370, 371  
 Marx, S. J., 252, 258, 260  
 Masaki, B. W., 33, 38, 43  
 Masini, E., 76  
 Mason, A. Y., 468  
 Mason, H. S., 432  
 Mason, J. L., 433  
 Mason, M. E., 441-43, 452  
 Mason, S. T., 334, 340, 341, 343  
 Masotti, G., 491  
 Massari, V. J., 469  
 Massey, S. C., 191  
 Massingham, R., 10  
 Masten, L. W., 440  
 Masters, P. M., 166  
 Mastrangelo, R., 245  
 Masuda, M., 92, 93  
 Mathew, N. T., 464  
 Mathog, R. H., 281  
 Matin, S. B., 51  
 Matschinsky, F. M., 167, 191  
 Matsuda, T., 375  
 Matsui, S., 169, 191  
 Matsura, S., 554, 555  
 Matsushima, T., 393, 400  
 Matsutani, T., 168  
 Matsura, S., 433  
 Mattar, E., 117  
 Matteis, F., 578  
 Matthews, E. K., 86, 89  
 Matthews, G., 182  
 Matz, G. J., 281  
 Maurer, A. M., 231, 232, 234  
 Maurer, G., 270  
 Maurer, P., 473  
 Maurin, Y., 177, 180  
 Maick, K., 12  
 Maw, G., 579  
 Max, S. R., 215  
 Maxwell, J. H., 284  
 May, S. R., 91  
 Mayer, L., 492  
 Mayersohn, M., 577-79, 589  
 Maynert, E. W., 94  
 McBain, J., 579  
 McBride, A., 96-99  
 McBride, W. J., 190, 191  
 McCabe, B. J., 332  
 McCalden, T. A., 472  
 McCann, J., 393, 399, 403  
 McCann, S. M., 297, 302, 303, 311, 312  
 McCanne, T. R., 335  
 McCarthy, K. D., 217, 218  
 McConnell, J., 449  
 McCormick, J. G., 281  
 McCulloch, M. W., 10, 19, 21  
 McCulloch, R. M., 169, 172, 175  
 McCully, K. S., 166  
 McCunney, S. J., 361, 370  
 McCurdy, D. K., 273  
 McCurdy, J. A. Jr., 281  
 McEntee, W. J., 345  
 McGaugh, J. L., 324, 325, 334, 335, 337-40, 343, 345, 347  
 McGee, D. H., 93, 96  
 McGeer, E. G., 18, 168, 170, 177, 178, 180, 187, 189, 341  
 McGeer, P. L., 18, 187, 189, 341  
 McGIFF, J. C., 479-509; 272, 481, 482, 486, 488-502  
 McGrath, J. C., 19  
 McGrath, M. A., 10  
 McGuiness, T., 340  
 McGuire, J. C., 487  
 McIver, R. C., 440  
 McKellar, S., 312  
 McKenzie, I., 123  
 McKeown, C. E., 576  
 McKinney, G. R., 501  
 McLachlan, J. A., 447  
 McLennan, H., 89, 169, 172-77, 180, 185, 189, 190

## 632 AUTHOR INDEX

- McMahon, F. G., 279, 280  
 McMahon, R. E., 393, 399  
 McMartin, D. N., 440  
 McMillen, B. A., 360  
 McNary, W. F., 37, 38  
 McNay, J. L., 271  
 McPherson, G. A., 11  
 McQueen, J., 330  
 Medina, J. L., 464  
 Medrano, L., 126, 127  
 Meek, J., 468, 582  
 Meeker, B. E., 232  
 Meerloo, A. M., 96  
 Meier, C., 517  
 MEITES, J., 295-322; 296, 300, 304, 306-15  
 Meijra, E., 239  
 Melchers, L., 126  
 Melchione, S., 135  
 Meldolesi, J., 554, 555  
 Melhorat, A. T., 92  
 Melmon, K. L., 252-56  
 Melnyk, V., 298  
 Nelson, G. L., 259  
 Meltzer, H. Y., 310  
 Menard, D., 554, 556  
 Menard, R. H., 438  
 Mendelow, A. D., 472  
 Mendels, J., 361-63, 373  
 Mendis, T., 330  
 Mendoza, G., 64  
 Meneses, J., 443  
 Menesini Chen, M. G., 208, 218  
 Menn, J., 579  
 Mennini, T., 374  
 Mentz, P., 33  
 Mercer, R. D., 232  
 Mercier, M., 440  
 Meren, R., 253  
 Meringolo, C., 483  
 Merker, H. J., 556  
 Merrick, L., 12  
 Mess, B., 314  
 Messina, E. J., 492, 500, 502  
 Messing, R. B., 338, 343, 347  
 Metcalf, R. L., 531, 532  
 Metz, E. N., 239  
 Metzgar, R., 235  
 Metzger, H., 64-67  
 Metzler, M., 447  
 Meyer, H., 31  
 Meyer, J. S., 464, 466  
 Meyers, C. A., 296  
 Mical, R. S., 309, 310  
 Michaelis, E. K., 11, 177-80  
 Michaelis, M. L., 11, 177, 179, 180  
 Michaelson, J. K., 269, 270, 272-74  
 Michell, R. H., 71  
 Middlemiss, D. N., 10, 11, 18, 170  
 Middleton, S., 9  
 Midgley, A. R., 116  
 Mikawa, R., 554, 555  
 Miki, M., 440, 445  
 Miki, N., 436  
 Mikkelsen, E. J., 344  
 Mikol, Y. B., 440  
 Mikulaj, L., 314  
 Miledi, R., 8, 11  
 Millar, R. P., 298, 304  
 Miller, D., 554, 556  
 Miller, E. C., 395, 396, 439, 440, 446  
 Miller, J. A., 395, 396, 439, 440, 446  
 Miller, J. C., 11  
 Miller, J. G., 344  
 Miller, J. J., 185, 189  
 Miller, K. W., 85, 86  
 Miller, L., 148  
 Miller, L. H., 335  
 Miller, O. N., 272  
 Miller, R. J., 370  
 Miller, S., 586  
 Miller, S. A., 284  
 Millis, E. R., 512  
 Milner, B., 326, 346, 347  
 Milstein, C., 126, 127  
 Minkes, M. S., 484  
 Minneman, K. P., 362  
 Minor, S., 588, 589  
 Minowada, J., 134, 239  
 Misbach, J., 473  
 Miser, H. J., 549, 569  
 Mishler, K. C., 521  
 Mishra, R. K., 369  
 Misono, K., 277, 495  
 Misra, C. H., 166  
 Mitchell, B. S., 239  
 Mitchell, J. F., 9  
 Mitchell, K., 280  
 Mitchell, P. R., 10-12, 19  
 Mitchell, R. J., 156  
 Mitchell, T. J., 139, 151  
 Mitnick, M., 314  
 Mitoma, C., 440  
 Mitro, A., 314  
 Mittelman, A., 448  
 Mix, M. C., 450  
 Miya, T. S., 440  
 Miyai, K., 120  
 Miyake, T., 136  
 Miyake, Y., 445  
 Miyamoto, M. D., 8, 11  
 Miyamoto, T., 483  
 Miyoshi, T., 281  
 Mizuta, T., 373  
 Mobarok Ali, A. T. M., 10  
 Mobley, P. L., 361-63  
 Mobley, W., 208, 212, 219  
 Modell, G., 584  
 Moeglen, J. M., 337  
 Moeglen J. M., 337  
 Moerlin, C., 284  
 Moffat, A. C., 43  
 Mogenson, G. J., 341  
 Mogilevsky, J. A., 300  
 Mohammed, S. L., 515  
 Mohler, H., 97, 98, 100, 101, 376-78  
 Mohr, G., 440  
 Mohr, U., 134  
 Mohs, R. C., 329-31  
 Moir, W. M., 93  
 Moises, H. C., 345  
 Molenaar, P. C., 8, 11, 13  
 Molinoff, P. B., 361-63  
 Molloy, B. B., 183  
 Moncada, S., 479, 481, 484, 486, 487, 490, 491, 495, 501  
 Mondal, S., 395  
 Mongar, J. L., 64, 67-70, 76  
 Montali, R. J., 407  
 Montel, H., 20  
 Montesano, R., 148, 393, 399, 401  
 Montgomery, P., 218  
 Montgomery, R. G., 500  
 Moody, D. E., 440  
 Mooney, J. S., 554, 556  
 Moore, D. E., 49, 50  
 Moore, K., 311, 312, 314  
 Moore, K. E., 189, 366, 370  
 Moore, R. W., 440  
 Moore, R. Y., 300, 339, 346, 467  
 Moore, T. J., 489  
 Morales, J. A., 450  
 Moran, N. C., 75  
 Morello, A., 436, 440  
 Morgan, A. M., 582, 588  
 Morgan, J. P., 512  
 Morgan, K. G., 87  
 Morgan, T. O., 284  
 Morgan, W. W., 90, 95, 96, 98-101  
 Morgane, P. J., 470  
 Morgenstein, G., 242  
 Morimoto, T., 554, 555  
 Morozowich, W., 36  
 Morré, D. J., 556  
 Morris, H. P., 445  
 Morris, H. R., 74  
 Morris, M. E., 170  
 Morrison, A. R., 498  
 Mortimer, C. H., 304  
 Morton, D. R., 487  
 Mosbach, E. H., 448  
 Moshinsky, J., 336  
 Moszmann, W. F., 10  
 Moskowitz, M. A., 463, 466, 473  
 Moss, A. A., 56  
 Moss, R. L., 306  
 Mosselmann, R., 554



- Mossman, B. T., 148, 151  
 Mota, I., 64  
 Mott, F. W., 92, 93  
 Mottin, J. L., 588  
 Moyer, J. A., 363  
 Moyer, J. H., 284  
 Moynihan, J., 298  
 Muchmore, A., 235  
 Mudd, J. G., 490  
 Mudge, G. H., 55, 277  
 Muellener, D., 554  
 Mueller, G. P., 310-12, 314, 315  
 Mueller, R. A., 218, 219  
 Mugnaini, A. E., 208, 221  
 Muirhead, E. E., 481, 497  
 Mukherjee, C., 251  
 Mukhtar, H., 438  
 Mulder, A. H., 10-14, 17  
 Mulé, S. J., 87, 130  
 Mullane, K., 484  
 Mullane, K. M., 491, 501  
 Müller, E. E., 313, 372  
 Muller, H. F., 330  
 Muller, M. J., 10  
 Müller, P., 360, 366, 369, 371, 374, 377  
 Müller-Eberhard, U., 436, 445  
 Müller-Schweinitzer, E., 465  
 Mullikin, C., 251  
 Mullikin-Kilpatrick, D., 380  
 Mulvihill, E. R., 449  
 Mulvihill, J. J., 134  
 Muncan, J., 442  
 Munoz-Marcus, M., 376  
 Muranishi, S., 42, 43  
 Murayama, K., 85  
 Murayama, S., 191  
 Murphy, D., 581  
 Murphy, R. A., 206  
 Murphy, R. C., 479, 480  
 Murphy, S. D., 524  
 Murray, T. G., 279  
 Murrin, L. C., 14  
 Murty, K. G., 569  
 Musacchio, J., 581  
 Muscholl, E., 9, 10, 17  
 Musial, J., 495  
 Mussini, E., 166  
 Musty, R. E., 340  
 Muta, E., 436, 437, 440  
 Muther, R. S., 494  
 Mützel, M., 279  
 Mycek, M. J., 84, 93, 95  
 Myers, S. L., 11  
 Mylecharane, E. J., 465, 471, 473  
 Mytilineou, C., 214, 221  
  
 N  
 Naber, D., 368  
 Nachmansohn, D., 511  
 Nadeau, R. A., 10  
 Nadi, N. S., 190, 191  
 Nadler, J. V., 187, 189, 190  
 Nadler, L. M., 237  
 Nagai, N., 2  
 Nagai, K., 208  
 Nagao, M., 393, 400, 433  
 Nagasawa, H. T., 585  
 Nagata, Y., 168  
 Nagy, J. L., 14  
 Nahmod, V. E., 11  
 Nahoraki, S. R., 369  
 Nakai, Y., 313  
 Nakamura, S., 369  
 Nakanishi, K., 408  
 Nankin, H. R., 301  
 Nanra, R. S., 494  
 Narahashi, T., 84, 85  
 Nascimento, L., 277  
 Nasletti, A., 271, 481, 482, 498, 499  
 Nathan, D. G., 242  
 Nathanson, J. A., 467, 468, 471  
 Natsuki, R., 101  
 Nausieda, P. A., 361, 367, 368, 370, 372  
 Naya-Vigne, J., 253, 255, 257  
 Naylor, B., 501  
 Naylor, R. J., 369  
 Neal, M. J., 191  
 Neal, R. A., 437  
 NEBERT, D. W., 431-62; 134, 157, 435, 437, 438, 440-46, 448-53  
 Nedergaard, O. A., 10  
 Needleman, P., 473, 484, 498, 501  
 Neer, R. M., 252, 258, 260  
 NEGISHI, M., 431-62; 436, 437, 440, 442, 445, 446, 449, 451, 453, 554, 555  
 Neill, J. D., 309  
 Neiman, P. E., 241-44, 451  
 Neims, A. H., 166, 435, 581  
 Neises, G. R., 167  
 Nell, J., 464  
 Nelson, C. J., 407  
 Nelson, F. R., 153, 155  
 Nemati, M., 279, 284  
 Nemoto, N., 433  
 Neri, P., 121  
 Nesbit, M. E., 235, 244  
 Nett, T. M., 301  
 Netter, K. J., 440  
 NETTESHEIM, P., 133-63; 135, 137-45, 147-51, 153-56  
 Netzloff, M. L., 425  
 New, D. A. T., 425  
 Newberne, P. M., 138  
 Newcombe, A.-M., 447  
 Newgrosh, G., 10  
 Newhouse, M. L., 146  
 Newton, W. T., 114  
 Nezamis, J. E., 492  
 Ng, K. K. F., 486, 488, 490  
 Ng, K. T., 331  
 Nicholls, J. G., 182  
 Nichols, W. W., 393, 399, 403  
 Nicklas, W. J., 187  
 Nicolaou, K. C., 277, 501  
 Nicolescu, E., 208, 211, 212  
 Nicoll, R. A., 83, 88, 176, 177, 333  
 Nicholson, G. L., 32  
 Nielsen, I. M., 367  
 Nielsen, M., 378  
 Nieouillon, A., 18  
 Nies, A. S., 271, 272, 275, 277, 490  
 Niizata, N., 301  
 Nijm, W., 583  
 Nikolovski, O., 335  
 Nilsson, G., 333  
 Nirenberg, M., 380  
 Nishikawa, K., 498  
 Nishino, T., 433  
 Nistri, A., 165, 177, 181  
 Niswender, G. D., 116, 301  
 Nizankowska, E., 495  
 Nizankowski, R., 495  
 Njå, A., 208, 210, 211, 214, 222  
 Nkrumah, F. K., 239  
 Noble, R. E., 284  
 Noel, D., 243  
 Noël, G., 440  
 Nogami, H., 39  
 Noguchi, Y., 14, 376  
 Nolan, J. D., 335  
 Noll, R. M., 266, 270, 285  
 Nomeir, A. A., 528, 532, 533  
 Nomura, T., 136  
 Nomura, Y., 373  
 Nora, A. H., 586  
 Nora, J. H., 586  
 Norby, L. H., 280  
 Nordberg, A., 95-99, 376  
 Nordmann, J. J., 86, 89  
 Norman, R. L., 436, 445  
 Norn, S., 74  
 Norris, J. W., 466  
 Norris, P. J., 171  
 North, R. A., 12, 15  
 Northover, B. J., 74  
 Northup, J. K., 254, 257, 258  
 Norton, P. R. E., 96  
 Norton, S., 516, 517  
 Noshiro, M., 433  
 Nott, M. W., 8, 16  
 Novak, R. F., 85, 91  
 Novikoff, A. B., 554  
 Nowicky, M. C., 10, 368, 372  
 Nuforo, C., 520  
 Nyback, H. V., 360  
 Nygaard, A., 580

## 634 AUTHOR INDEX

- Nyén, E. S., 167, 189  
 Nystrom, B., 168, 187
- O
- Oakes, D. J., 168, 169, 172-74, 176, 180, 181, 184, 185, 191  
 Oasma, J. A., 271, 272, 275, 277, 490, 495  
 O'Brien, C., 235, 236  
 O'Brien, P. J., 395, 432  
 Obrist, W. D., 472  
 Ochiai, K., 301  
 Ocha, H. D., 243  
 O'Connell, J. M. B., 277  
 Odagiri, H., 183  
 Odden, E., 187  
 Oei, T. P. S., 341  
 Oesch, F., 208, 221, 412, 433, 434, 440  
 Ogren, S.-O., 343, 359, 362  
 Ohba, M., 433  
 Ohmori, S., 166  
 Ohmori, T., 408  
 Ohnishi, K., 440  
 Ohnuma, T., 239  
 Oja, S. S., 167  
 Oka, T., 445  
 Okada, M., 400  
 Okada, T., 97, 98, 100, 101, 376-78  
 Okamoto, K., 89  
 Okamoto, M., 83, 93-96, 518  
 OKEY, A. B., 431-62; 441-43, 446, 452, 453  
 Olkita, K. E., 138  
 Okumura, K., 233  
 OKUN, R., 597-604; 284  
 Oldendorf, W. H., 52  
 Olds, M. E., 342  
 O'Leary, M., 244  
 Olesen, J., 471  
 Olesen, O. V., 587  
 Oliver, G. C., 114, 116  
 Oliver, M., 177  
 Oliveros, J. C., 337  
 Oliw, E., 272  
 Olney, J. W., 166, 187  
 Olsen, R. L., 447  
 Olsen, R. W., 90  
 Olsen, U. B., 277, 488, 493  
 Olson, G. A., 338  
 Olson, L., 208, 211, 212, 219  
 Olson, R. D., 338  
 Omura, T., 433, 434, 450, 554-56, 559  
 Onaya, T., 313  
 Ondrusek, G., 93, 95, 96, 102  
 Ondrusek, M. G., 102  
 O'Neill, J. P., 400, 401, 403  
 Onesti, G., 284  
 Ono, H., 170  
 Opmeer, F. A., 12  
 Oppenheimer, S., 278  
 Optner, S. L., 549  
 Orange, R. P., 75, 76  
 O'Reilly, R., 587  
 Orlandi, M., 483  
 Orlandini, A., 121  
 Orloff, J., 481, 498  
 Orly, J., 251  
 Orme, A. E., 334, 335  
 Osrning, L., 74  
 Orö, L., 473  
 Orrenius, S., 556, 559  
 Orton, T. C., 440  
 Osborn, J. L., 277  
 Osborne, H., 12, 21  
 Oshima, H., 301  
 Oslar, A. G., 67  
 Oster-Granite, M. L., 190  
 Osterland, C. K., 128  
 Outfield, A. M., 466  
 Ostlund, R. E., 84  
 Othman, M. A., 512, 528, 532  
 Otsuka, M., 12, 191  
 Otten, M., 440  
 Otten, U., 206, 208-15, 218, 220-22  
 Otto, J., 426  
 Ouchi, J., 281  
 Overall, J., 331  
 Overstreet, D. H., 365, 372, 375, 377  
 Overton, E., 31  
 Övrelid, L., 473  
 Ovtracht, L. P., 556  
 Owen, F., 367, 370  
 Owens, I. S., 433, 444, 453  
 Owman, C., 222, 465, 471, 472  
 Ozawa, N., 440, 445
- P
- Pacheco, H., 270  
 Pacholczyk, D., 489, 500  
 Paddock, G. L., 280  
 Page, N. P., 409  
 Paigen, B., 134  
 Paigen, K., 134, 448  
 Paik, K.-S., 189  
 Pain, C., 235  
 Painter, R. B., 399  
 Paiva, A. C. M., 338  
 Paiva, M. Q., 10, 21  
 Pal, B. C., 153, 155  
 Palade, G. E., 554, 556, 559  
 Palfai, T., 332, 339, 340, 342, 343  
 Palkovitz, M., 297, 305, 314  
 Palmer, G. C., 364-66  
 Palmer, H., 96  
 Palmiter, R. D., 449  
 Paloheimo, S., 282  
 Pandey, G. N., 363, 368  
 Panerai, A. E., 312, 313  
 Pang, K. Y., 86  
 Pang, K. Y. Y., 86  
 Pannese, E., 218  
 Paoletti, C., 439, 440  
 Paoletti, R., 480  
 Paolini, N. S., 448  
 Papadaki, L., 208, 214  
 Paquin, J., 269, 270  
 Parantainen, J., 473  
 Paravicini, U., 209, 221  
 Parekh, N., 182, 183  
 Parihar, L. M., 512  
 Park, C. R., 34  
 Park, J. F., 149  
 Park, J. Y., 36  
 Parke, D. V., 94, 395  
 Parker, B. M., 114, 116  
 PARKER, C. W., 113-32; 71-75, 113-19, 122, 124-26, 128  
 Parker, G. L., 440  
 Parker, K. L., 75  
 Parker, M. L., 114, 121  
 Parkinson, A., 440  
 Parkki, M. G., 440  
 Parkman, R., 242  
 Parks, T. P., 502  
 Parry, E. H. O., 284  
 Parry, J., 400  
 Parson, J., 303  
 Parson, W., 259  
 Partlow, L. M., 217, 218  
 Passananti, G. T., 587  
 Patak, R. V., 271, 277  
 Patangia, G. N., 515-17  
 Patel, B. C., 374  
 Patel, Y., 303-5  
 Patey, G., 14, 18, 372  
 Patkar, S. A., 67  
 Paton, D. M., 10  
 Paton, W. D. M., 9  
 Patrono, C., 484  
 Patterson, P. H., 208, 209  
 Paul, C., 10  
 Paul, S. M., 310, 364  
 Pauley, J., 140  
 Paulson, O. B., 464, 466  
 Paulsard, J. R., 272  
 Pauly, J. E., 550  
 Paumgartner, D., 554  
 Paupardin-Tritsch, D., 467  
 Pavlov, K. L., 156  
 Pay, S., 11  
 Payne, D., 584  
 Pearce, F. L., 67, 69, 76, 206, 207, 211, 217, 220, 221  
 Pearl, E. R., 237  
 Pearson, H. W., 610  
 Pearson, J., 210, 211, 217  
 Pecorak, J. B., 281  
 Pedemonte, J., 436  
 Pedersen, E., 151

- Pedersen, R. A., 443  
 Pedrosa, E., 301  
 Peitzman, S. J., 279, 280  
 Pelayo, F., 10, 16  
 Pelham, R. W., 311  
 Pelikan, E. W., 37  
 Pelkonen, O., 433, 445, 446, 450  
 Pellegrino de Iraldi, A., 210, 220, 221  
 Pelletier, G., 301  
 Penasse, W., 554, 556  
 Penney, R. H. C., 171  
 Peralta, E., 189  
 Perel, J. M., 587  
 Perbach, J. L. Jr., 501  
 Perkins, E. H., 136  
 Perkins, I. V., 239  
 Perkins, J. F., 380  
 Perkins, N. A., 10, 11  
 Pernow, B., 333  
 Peroutka, S. J., 373  
 Perrin, E., 240  
 Perrone, M. H., 191  
 Perrot, P., 19  
 Perry, B. W., 189  
 Perry, E. K., 329  
 Perry, J. W., 445  
 Perry, K. M. A., 512, 535, 537  
 Perry, P. E., 402, 443  
 Perry, R. H., 329  
 Perry, R. S., 84  
 Pert, A., 359, 360, 364, 368  
 Pert, C. B., 359, 360, 364, 368, 379  
 Pesando, J., 235, 236  
 Penkar, B. A., 484  
 Peter, L., 314  
 Peters, B. H., 329  
 Petersen, R. C., 610  
 Peterson, E., 432  
 Peterson, E. R., 216  
 Peto, R., 134  
 Pettersson, G., 469  
 Petzold, G. L., 399  
 Peyronnard, J. M., 214, 218  
 Pfefferbaum, A., 330  
 Pfeil, D., 433  
 Pfeil, K. A., 95, 96, 98-100  
 Pfeuffer, T., 252-54  
 Phalente, L., 126, 127  
 Phil, A., 577, 586  
 Phillips, A. G., 341, 343, 347, 348  
 Phillips, B. M., 440  
 Philpot, R. M., 436, 445  
 Piatek, J., 427  
 Piccoli, C., 393, 399  
 Pichler, E., 466  
 Pickelmann, P., 185  
 Pickholz, D., 367  
 Pickworth, F. A., 92, 93  
 Pictet, R. L., 424  
 Pictou, T. W., 335  
 Pielou, E. C., 536  
 Pienta, R., 402, 403  
 Pierce, M., 240  
 Piercy, M., 346  
 Piercy, M. F., 326  
 Pieroni, R. R., 117  
 Pierro, L. J., 427  
 Pike, J. E., 481  
 Pinca, E., 484  
 Pinkel, D., 231, 233  
 Pinsky, C., 21  
 Pinto, H., 117  
 Piper, L. J., 440  
 Piper, P. J., 74, 486  
 Pirola, C. J., 11  
 Pitcock, J. A., 497  
 Pitot, H. C., 134, 135, 407  
 Pittman, Q. J., 176  
 Pitts, R. F., 54  
 Pizzo, P. A., 244, 245  
 Plakogiannis, F. M., 38  
 Plant, T. M., 297  
 Platts, M., 277  
 Pleasure, D. E., 521  
 Pletscher, A., 468  
 Plotaky, P. M., 315  
 Pochedly, C., 244  
 Podgany, H., 588  
 Poggendorf, J. K. Jr., 149, 150  
 Poggini, L., 491  
 Pohl, I. M., 10, 15  
 Pohl, S. L., 251  
 Poirier, L. A., 393, 399  
 Polak, R. L., 8, 9, 11, 13  
 Poland, A. P., 441-43, 448, 452  
 Polc, P., 176  
 Pollard, H., 14, 18, 371  
 Ponociet, F., 440  
 Pong, S.-S., 272  
 Poole, R. W., 556  
 Poplack, D., 235, 245  
 Poplack, D. G., 244, 245  
 Porcellati, G., 512  
 Port, C. D., 149  
 Porter, G. S., 588  
 Porter, J. C., 301, 309, 310  
 Poser, C. M., 472  
 Posey, L. C., 93  
 Post, R. M., 337, 344, 358  
 Postic-Grujina, A., 585  
 Potashner, S. J., 170  
 Potter, D. M., 494  
 Potter, M., 451  
 Pota, J. T., 259  
 Poulakos, J. J., 467  
 Poulsen, B. J., 44  
 Poulsen, E., 518  
 Poulter, M., 367  
 Pousette, A., 438  
 Pow, M., 124  
 Powell, J. R., 10  
 Powles, R. L., 242  
 Poyser, N. L., 501  
 Prabhakaran, K., 512  
 Prada, C., 179, 181  
 Prasad, D. R., 279  
 Prat, J. C., 10  
 Prazma, J., 281  
 Preissig, S. H., 514, 516-18  
 Prentice, G., 235, 236  
 Prentice, H. G., 235  
 Prentice, R. L., 242, 243  
 Prescott, L. F., 284  
 Proslar, M. J., 281  
 Price, M. G., 121  
 Price, M. T. C., 341  
 Price, R. A., 244, 245  
 Price, T., 586  
 Prichard, J. W., 87  
 Prickett, C. S., 577  
 Princeas, J., 515-17  
 Printz, M. P., 502  
 Prival, M. J., 394  
 Probert, G., 191  
 Probst, G. S., 401  
 Protasis, P., 366, 367, 370-72  
 Prouty, R. W., 582, 588  
 Prue, C. A., 588  
 Publicover, S. J., 8, 11, 13  
 Pugliese, F., 484  
 Puil, E., 170  
 Puil, E. A., 185  
 Pullar-Strecker, H., 588  
 Pullen, J., 235  
 Pulliam, M. W., 215, 218  
 Purchase, I. F. H., 393, 394, 402, 403  
 Puri, S. K., 372  
 Puro, H. E., 147  
 Purves, D., 208, 210, 211, 214, 222  
 Purvis, J. L., 433  
 Putnam, R. W., 364  
 Pycock, C. J., 10, 11  
 Pylev, L. N., 148  
 Pyykkö, K., 440  
 Q  
 Quastel, D. M. J., 89  
 Quattrone, A., 368  
 Quick, C. A., 281  
 Quijada, M., 303  
 Quik, M., 369  
 Quilley, C. P., 488, 496  
 Quilley, J., 497  
 Quintanilla, A., 277, 279, 284  
 R  
 Rabkin, R., 471  
 Raby, K., 582  
 Racagni, G., 368  
 Racine-Weisbuch, M. S., 120  
 Radlow, R., 344

## 636 AUTHOR INDEX

- Radman, M., 399  
Radomski, J. L., 440  
Radtke, H. E., 448  
Radue, R. W., 530, 534-37  
Raff, M. C., 67  
Rahintula, A. D., 432  
Rahman, Y. E., 34  
Rainbow, T. C., 331, 332  
Rainey, J., 578  
Raisman, R., 359, 364, 373  
Raiteri, M., 10, 11, 367  
Rajewsky, K., 126  
Ramberg, R. E., 244  
Ramel, C., 393  
Ramirez, G., 179, 181  
Ramirez, O., 284  
Ramsay, N., 244  
Ratnwell, P. W., 271, 272, 275, 277, 480  
Rand, M. J., 10, 19, 21  
Raneck, C., 584  
Rankin, G. O., 266-69  
Ransom, B. R., 177  
Ranta, T. P., 314  
Raper, C., 11  
Rapoport, J. L., 344  
Rapoport, S. I., 52  
Rapp, J. P., 448  
Rapp, P. R., 340  
Rappaport, A. M., 554  
Rappeport, J., 242  
Rapson, N. T., 234-36  
RASKIN, N. H., 463-78; 463, 470, 471, 582  
Rasmussen, H., 492  
Ratner, J., 329  
Ravdin, I. S., 92  
Raviart, B., 280  
Raviola, E., 552  
Ray, J. E., 74  
Ray, V., 393, 394  
Raz, A., 484  
Razdan, A. K., 259  
Rea, M. A., 190, 191  
Reaman, G. H., 235  
Rebec, G. V., 370  
Recordier, M., 512  
Rector, F. C. Jr., 273  
Reel, J. R., 301  
Rees, H. D., 334  
Reeves, A. L., 147  
Regan, D., 335  
Rehfeld, J., 333  
Reichert, B. L., 514, 515, 521, 524  
Reichert, L. E., 116  
Reichlin, S., 303, 305, 314  
Reilly, A., 134  
Reimann, W., 10  
Reinhard, J. F. Jr., 463, 466  
Reinhardt, W., 330  
Reinherz, E. L., 237, 242  
Reinmuth, O. M., 464  
Reis, D. J., 191  
Reisine, T. D., 177, 180, 359, 360, 365  
Reiss, R. F., 491, 496  
Remacle, J., 554, 555  
Remmer, H., 94, 439, 440, 556, 588  
Remy, C., 579  
Remy, R., 337  
Renaud, L. P., 176  
Rendell, M., 251  
Renjel, L. E., 280  
Renton, K. W., 450  
Renvoize, E. B., 330  
Renyi, A. L., 359, 362  
Repetto, Y., 436  
Reth, M., 126  
Reubi, J. C., 11, 12, 18, 189, 190  
Reus, V. I., 337, 344  
Revuelta, A., 166, 377  
Rezer, B., 588  
Rhines, F. N., 550  
Ribeiro, J. A., 12  
Ribot, T., 327  
Ricaurte, G. A., 370  
Riocard, R., 245  
Rice, E. G., 530, 534, 535, 538, 539  
Rice, J. M., 407, 408  
Rice, S. A., 439, 440  
Rich, A., 91  
Rich, M. L., 512  
Richards, C. D., 88, 191  
Richardson, R. J., 519, 520  
Richardson, T. L., 172, 175, 176  
Richert, D., 580  
Richter, C. B., 141, 142  
Richter, D., 166  
Richter, D. W., 182, 183  
Richter, J. A., 21, 88, 89  
Richter, R., 281  
Ridge, J. W., 582  
Riegelman, S., 56  
Riesen, W., 128  
Riffes, W. R., 98, 99  
Riggi, S. J., 361  
Rigter, H., 334, 336, 343  
Riker, W. F. Jr., 517, 518  
Riley, A. L., 338  
Rimm, A. A., 243  
Rinkus, S. J., 393, 394, 399  
Riopelle, R. J., 215, 216  
Rippe, C., 242  
Ritchie, J. M., 608  
Rittenhouse-Simmons, S., 483  
Ritz, J., 235, 236  
Ritzmann, R. F., 95, 96, 98, 100, 101, 371  
Rivier, C., 296, 302, 304, 305, 307  
Rivier, J., 302  
Roach, A. G., 19  
Robb, C. M., 267  
Robbi, M., 554, 556  
Röberg, I. M., 473  
Roberfroid, M., 440  
Robert, A., 492  
Roberts, D. C. S., 340, 341, 343  
Roberts, E., 100  
Roberts, F., 191  
Roberts, J., 518  
Roberts, M. A., 495, 497  
Roberts, M. S., 49, 50  
Roberts, P. J., 10-13, 170, 171, 177-80, 183, 187, 189-91  
Roberts, R., 117, 124  
Robertson, L. W., 440  
Robinson, J. R., 442  
Robinson, L. L., 235  
Roche, B., 440  
Roche, K. E., 336  
Roche, M., 270  
Rodbard, D., 124  
Rodbell, M., 251, 252  
Roe, F. J. C., 134, 140, 148  
Roger, H., 512  
Rogers, A. E., 138  
Rogers, J., 378  
Rogers, J. A., 87  
Rogers, J. B., 326, 327, 347  
Rohde, B. H., 190, 191  
Romero, J. C., 493  
Romine, J. S., 214, 218  
Rorg-Smith, R., 338  
Rose, C. L., 4  
Rose, J. C., 315  
Rose, S. P. R., 332  
Rose, W. C., 243  
Rosen, F. S., 242  
Rosenberg, B., 306  
Rosenberg, C., 378  
Rosenberg, H. C., 93-96, 378  
Rosenberg, P. H., 86  
Rosenberg, T., 34  
Rosenblatt, J. E., 359, 360, 364, 368  
Rosenblatt, S. G., 271, 277  
Rosenfeld, R. L., 239  
Rosengarten, H., 367, 370, 371  
Rosengren, E., 208, 211, 212, 222  
Rosenkranz, H. S., 393, 399, 400  
Rosenzweig, M. R., 334  
Roulhoff, B. N., 359, 362  
Rosniatowski, C., 300  
Ross, C. A., 374, 471  
Ross, C. R., 272, 274  
Ross, E. M., 251-56, 261  
Ross, L. L., 214  
Ross, S. B., 359, 362  
Rossier, G., 298  
Roth, G. J., 484  
Roth, R. H., 10, 360, 368, 369, 372  
Roth, S. H., 83

- Rothberg, S., 432  
 Rothlin, E., 465  
 Rothman, S., 45  
 Roth-Schlechter, B. F., 95  
 Rothschild, A. M., 75  
 Rothstein, E., 582, 587  
 Rotrosen, J., 367  
 Rouot, B. M., 14, 358  
 Rouot, B. R., 358  
 Routtenberg, A., 341, 342, 347  
 Rovera, G., 91  
 Rowland, J., 151  
 Rowlands, D. J., 471  
 Rowlands, G. J., 12, 13, 171, 189  
 Royer, R., 588  
 Rozmaryn, L., 270  
 Ruben, E. H., 183  
 Rubenstein, J. A., 588  
 Ruckpaul, K., 433  
 Rude, T. H., 157  
 Rudomin, P., 183  
 Rumens, M. J., 524-28, 530, 532  
 Rumke, C. L., 93  
 Rummel, W., 84, 85  
 Russell, R. P., 284  
 Russell, R. W., 372, 375, 377  
 Russo, E., 554  
 Russo, H. F., 269, 270, 272-74, 278-80  
 Rutter, W. J., 424  
 Ryan, D. E., 436-38, 440, 452  
 Ryan, J. J., 183  
 Ryan, J. R., 279, 280, 340
- S
- Saarni, H., 445, 450  
 Saavedra, J. M., 297, 305, 468  
 Sabadie, N., 393, 399  
 Sabatini, M. T., 210, 220, 221  
 Sabri, M. F., 512  
 Sachar, E. J., 368  
 Sachs, L., 402  
 Sadove, M. S., 98, 100  
 Saenger, G., 576  
 Safe, S., 440  
 Saffioti, U., 140, 148, 149  
 Saffran, M., 306  
 Said, S., 333  
 Saide, J. D., 206  
 Saijo, S., 281  
 Saito, K., 14, 376  
 Saito, T., 482  
 Sakai, F., 464, 466  
 Sakata, M., 530  
 Sale, G., 242, 243  
 Sales, M., 183  
 Sallan, S. E., 231, 235, 236, 238  
 Saller, C. F., 372  
 Salmon, J., 487  
 Salmon, J. A., 491, 502
- SALOMON, M. R., 251-64;  
 252, 255, 257, 260  
 Salomon, Y., 251  
 Salt, T. E., 185  
 Saltzstein, E. C., 243  
 Samanin, R., 374  
 Sampson, B. F., 512  
 Samuelson, J., 215, 216, 218-20  
 Samuelsson, B., 74, 277, 479-81, 483, 487, 490  
 San, R. H. C., 399, 401  
 Sanborn, J. R., 531, 532  
 Sandell, J., 440  
 Sanders, J. E., 242-44  
 Sanders-Bush, E., 469  
 Sandler, J. A., 501  
 Sandler, M., 464, 473  
 Sandman, C. A., 335  
 Sandoval, E., 167  
 Sandoval, M. E., 190  
 Sandow, J., 300  
 Sanghui, L., 314  
 Sanhucza, E., 450  
 Sannita, W. G., 335  
 Sano, Y., 297, 298  
 Santi, P. A., 283  
 Santos, G. W., 242  
 Sanyal, M. K., 425  
 Saperstein, R., 305  
 Sarai, K., 361, 362  
 Sarcione, E., 579  
 Sargent, N. S. E., 55  
 Sasaki, S., 554, 555  
 Sasayama, T., 530  
 Sass, B., 157  
 Sass, L., 142  
 Sasse, D., 554, 556  
 Sastri, V. S., 577  
 Sathananthan, G., 336  
 Sato, H., 303, 435, 436  
 Sato, R., 433, 434, 436, 438, 450, 453  
 Sato, Y., 281  
 Satoh, M., 377  
 Satran, R., 585  
 Satta, M. A., 484  
 Sauter, A. M., 588, 589  
 Savage, D. D., 373  
 Savel, J., 45  
 Sawa, H., 280  
 Sawyer, B. D., 310  
 Sawyer, C. H., 310, 311  
 Sawynok, J., 12, 21  
 Saxena, P. R., 464-66, 471  
 Sayers, M., 610  
 Sbarra, A. J., 34  
 Scaramuzzi, R., 311  
 Scatton, B., 10, 19, 369  
 Schabel, F. M., 239  
 Schacht, U., 12  
 Schacter, B., 242  
 Schaefer, T., 208, 210, 214, 220, 221  
 Schaeffer, S. F., 552
- Schaffer, R. L., 450  
 Schaller, H. C., 425, 426  
 Schally, A. V., 296-99, 301-4, 306, 335, 338  
 Schanker, L. S., 31, 33, 41  
 Schaum, E., 513  
 Schaumann, W., 9  
 Schaumburg, J. P., 588  
 Schaumburg, H. H., 512  
 Scheff, S. W., 167, 189  
 Schenker, T. M., 190  
 Schenkman, J. B., 440  
 Scherer, B., 272, 494  
 Scherer, R. A., 42  
 Scherer, U., 189  
 Schettini, G., 368  
 Scheuplein, R. J., 45, 47  
 Schieferstein, G., 407  
 Schild, H. O., 67, 75  
 Schiller, F., 465  
 Schiller, G. D., 375  
 Schizume, K., 303  
 Schlaepfer, W. W., 584  
 Schlaepfer, W. T., 325, 326, 328  
 Schlegel, W., 272  
 Schleifer, L. S., 253, 254, 257, 258  
 Schlensinger, J., 65  
 Schlossberg, A. J., 463, 466  
 Schlosser, W., 88  
 Schlossman, S. F., 235-37, 242  
 Schmähl, D., 134  
 Schmassmann, H. U., 440  
 Schmeltz, L., 395, 401  
 Schmid, K., 440  
 Schmidt, C. F., 2  
 Schmidt, M., 277  
 Schmidt, M. J., 183, 362, 363  
 Schmitt, F. O., 187  
 Schmucker, D. L., 554, 556  
 Schneeburg, J. D., 268  
 Schneider, D. R., 183  
 Schneider, H. P. G., 297, 311, 312  
 Schneider, W. J., 281, 282  
 Schneider-Affeld, F., 84  
 Schnermann, J., 494, 495  
 Schnieders, J. R., 273, 274  
 Schoenig, G. P., 440  
 Schofield, G. C., 552  
 Schönbaum, E., 210-13  
 Schorr, W. J., 280  
 Schousboe, A., 168  
 Schram, M., 251  
 Schreiber, H., 141, 142, 144, 156  
 Schrier, R. W., 277  
 Schroeder, F., 85, 86  
 Schrogie, J., 587  
 Schroidl, J., 10  
 Schubert, P., 379  
 Schuchard, J., 279  
 Schucker, F., 210, 222  
 Schultz, E. M., 266-68, 284

## 638 AUTHOR INDEX

- Schultz, J. E., 363, 364  
 Schultzberg, M., 21, 333  
 Schulz, R., 375, 380  
 Schuster, C. R., 370  
 Schwab, M. E., 206, 208-18, 220-22  
 Schwaber, J., 128  
 Schwarcz, M., 581  
 Schwarcz, R., 14  
 Schwartz, A., 473  
 Schwartz, B. D., 120, 125  
 Schwartz, J., 277  
 Schwartz, J. C., 14, 18, 361, 366, 367, 370-72  
 Schwartz, J. H., 332  
 Schwartz, J. P., 215, 216  
 Schwartz, R., 362  
 Schwarzmiller, J., 253  
 Schweitzer, J. W., 362  
 Schwemmer, B. A., 515  
 Scicli, A. G., 498  
 Scollan, E. L., 338  
 Scott, T. S., 412  
 Scriabine, A., 275, 278, 280  
 Scribner, J. D., 145  
 Searle, C. E., 397, 398, 404, 409, 412  
 Sears, M. D., 170  
 Sechter, D., 364  
 Secocf, R. L., 424  
 Seeman, P., 14, 83-85, 87, 359, 360, 366-71, 373, 374, 377  
 Seevera, M. H., 92, 93, 95  
 Sefera, I., 12  
 Segal, A., 153  
 Segal, D. S., 338, 347, 361, 370  
 Segal, M., 176, 184, 185, 190  
 Segawa, T., 373  
 Seiden, L. S., 370  
 Seidman, H., 133  
 Seidman, I., 135  
 Seifert, W. E. Jr., 370  
 Seiger, A., 219  
 Sela, M., 119  
 Seldin, D. W., 273  
 Selikoff, I. J., 133, 146  
 Selinger, Z., 253  
 Selkirk, J., 395  
 Sellakumar, A., 151  
 Sella, R., 284  
 Sellers, E. A., 210-13  
 Selliah, S., 577-79, 589  
 Sellinger, M. M., 362  
 Sen, L., 235, 236  
 Senekjian, H. O., 274  
 Sensenbrenner, L. L., 242  
 Serabjit-Singh, C., 436  
 Serner, G. G. N., 491  
 Serna, X., 337  
 Serra, G., 369  
 Serros, E. R., 271  
 Server, A. C., 205, 207  
 Shabel, F. M., 232  
 Shaikh, Z. I., 49  
 Shamszad, M., 588  
 Shand, D. G., 271  
 Shank, R. P., 167, 191  
 Shanks, R. G., 471  
 Shapovalov, A. I., 181, 182  
 Sharif, N. A., 171, 177-80, 183  
 Sharkawi, M., 587  
 Sharma, S. K., 380  
 Sharma, V. K., 14, 361, 365, 377  
 Sharpless, S. K., 93, 95, 96  
 Shashoua, V. E., 332, 333  
 Shaw, C. R., 395, 397, 398  
 Shaw, J. E., 44  
 Shaw, J. S., 10, 11, 18, 170  
 Shawer, M. F., 512, 528, 532  
 Shea-Donahue, P. T., 271, 275  
 Shear, M., 254  
 Sheard, P., 74  
 Shearman, C. W., 404  
 Shebuski, R. J., 491  
 Sheehan, P. P., 359  
 Sheffer, S., 448  
 Sheinin, E. B., 588  
 Shen, F. H., 379  
 Shenkman, L., 314  
 Shenoy, A. K., 10  
 Shepherd, J. T., 10  
 Sheppard, J. R., 98, 99  
 Shere, W. C., 440  
 Shibata, M., 408  
 Shibuya, I., 172  
 Shigamatsu, A., 434  
 Shih, T. W., 140  
 Shimazono, Y., 367  
 Shimizu, H., 183  
 Shimkin, M. B., 136, 137, 406  
 Shindo, H., 33, 35, 36, 39, 45  
 Shinozaki, H., 172  
 Shiriaev, B. I., 181, 182  
 Shirley, W., 34  
 Shnyder, B. I., 91  
 Shoemaker, H. A., 512  
 Shoji, R., 425  
 Shooter, E. M., 205, 207-9, 215-21  
 Shopain, B., 314  
 Shore, P. A., 360  
 Shows, T. B., 448  
 Shoyab, M., 154  
 Shreffler, D. C., 125  
 Shubik, P., 148  
 Shum, A., 210-13  
 Shum, S., 440, 443, 448  
 Shuster, L., 91  
 Sibley, C. H., 252  
 SIBLEY, D. R., 357-91; 367, 368, 380  
 Sicuteri, T., 470  
 Siddiqui, A. A., 587  
 Siegert, M., 439, 440  
 Sieghart, W., 76  
 Siekevitz, P., 556, 559  
 Siesjo, B. K., 471  
 Sievertson, H., 300  
 Siew, C., 93, 95  
 Siggins, G. R., 363, 364  
 Signoret, J. L., 330  
 Sikoloff, L., 582  
 Silberfarb, P., 586  
 Silbergeld, E. K., 372  
 Silberman, E., 344  
 Siler, T. M., 302  
 Siler-Kodr, T. M., 299, 301  
 Sillanpää, M., 464  
 Sillito, A. M., 185, 191  
 Silverman, T., 140  
 Silverstein, H., 281  
 Simard, D., 464, 466  
 Simko, B. A., 75  
 Simmonds, M. A., 98, 101  
 Simon, E. J., 379  
 Simon, F. R., 440  
 Simon, J. R., 99, 177, 180, 190  
 Simone, J. V., 231-34, 238  
 Simoni, A. M., 32  
 Simonnet, G., 11  
 Simonton, S., 187  
 Simpkins, J., 296, 306, 307, 310-14  
 Simpson, F. O., 277, 283  
 Simenky, M., 102  
 Singer, G., 327  
 Singer, J., 242, 243  
 Singer, M., 252, 258, 260  
 Singer, S. J., 32  
 Singh, J. M., 93  
 Singh, K., 187, 189  
 Singh, V. K., 341  
 Sinha, D., 304  
 Sirica, A. E., 407  
 Sitaram, N., 330  
 Sivak, A., 135, 145, 153  
 Sivakoff, M., 501  
 Sivarajah, K., 515  
 Sivit, C., 368  
 Sjaastad, O., 471, 473  
 Sjöberg, N.-O., 211, 222  
 Sjoerdama, A., 581  
 Sjöqvist, F., 211  
 Sjöstrand, N. O., 211  
 Skaper, S. D., 215  
 Skett, P., 310, 438  
 Skidmore, J. W., 147  
 Skinj, E., 464  
 Skipper, H. E., 232, 240, 241  
 Skovsted, L., 587, 588  
 Skrede, K. K., 189, 190  
 Slaga, T. J., 145, 154  
 Slater, P. C., 327  
 Slavin, R. E., 242  
 Slavin, S., 242  
 Sleight, S. D., 440  
 Sletkiewicz, J., 585

- Slotkoff, L. M., 271, 272, 275, 277
- Smaje, J. C., 88
- Smalstig, E. B., 310
- Smigel, M., 272, 490, 492, 501
- Smigel, M. D., 254, 257, 258
- Smith, A. J., 312, 313
- Smith, B. R., 436
- Smith, C., 281
- Smith, C. A., 281
- Smith, C. B., 359, 360
- Smith, C. C. T., 171
- Smith, C. M., 329
- Smith, D. E., 83
- Smith, E. M., 133
- Smith, F., 584
- Smith, G., 425
- Smith, H. V., 512
- Smith, J. E., 191
- Smith, J. M., 140
- Smith, J. W., 114
- Smith, M. L., 512, 513, 515-19, 534-36
- Smith, P. H., 259
- Smith, R. C., 368
- Smith, R. G., 147
- Smith, R. L., 55, 395
- Smith, S. A., 266, 282
- Smith, T. M., 140
- Smith, T. W., 473
- Smith, W. D., 302
- Smith, W. E., 148
- Smith, W. L., 498
- Smits, J. F., 466
- Smolen, V. F., 38
- Smuckler, E. A., 440
- Sneddon, J. M., 469
- Snodgrass, S. R., 12, 14, 177, 180
- Snow, G., 579
- Snow, I. B., 268, 269, 272-74, 279
- Snyder, C., 138-40
- Snyder, R., 395
- Snyder, S. H., 14, 190, 209, 221, 338, 358-60, 366-68, 370, 373-76, 379, 606, 607
- Sobel, B. E., 117, 124
- Sobotka, A. K., 74, 76
- Sofia, R. D., 466
- Sohn, R. S., 86, 87
- Sokal, J., 579
- Solomon, H. M., 587
- Somerville, B., 464
- Somerville, B. W., 464
- Somjen, G. G., 182
- Somogyi, A., 440
- Sonnenschein, C., 438
- Sonnhof, U., 182, 183
- SONNTAG, W. E., 295-322, 304
- Soreide, A., 187, 189
- Somowski, G., 278
- Soumireu-Mourat, B., 335, 338, 343
- Sourkes, T. L., 372
- Spalding, J. M. K., 512
- Spanis, C. W., 332
- Spannhake, E. W., 498
- Spano, P. F., 368, 372
- Spargo, B., 280
- Sparkes, R., 242
- Spaulding, T. C., 372
- Speck, J. C., 118
- Spector, J. F. S., 400, 403
- Spector, S., 114, 468, 581
- Speilmann, H., 424
- Spelsberg, T. C., 443
- Spence, D., 242
- Spencer, A. F., 37
- Spencer, H. J., 185, 189
- Spencer, P. S., 512
- Spero, L., 370
- Speroff, L., 490
- Speziale, E., 483
- Speziale, N., 483
- Spiegel, A. M., 252, 258, 260, 471
- Spiehler, V. R., 338
- Spielman, W. S., 277
- Spierings, E. L. H., 464, 466
- Spira, P. J., 465, 471, 473
- Spiro, D., 517, 554, 556
- Spitzer, S. A., 278
- Splawinski, J. A., 271, 272, 275
- Spoendlin, H., 515-17
- Spokas, E. G., 497
- Spokas, E. G., 177, 180, 370
- Sporn, J. R., 361-63
- Sporn, M. B., 140
- Sprague, J. M., 266, 284
- Sprecher, H., 484
- Springer, A. D., 325, 331
- Spring-Mills, E., 556
- Sproul, E. E., 448
- SQUIRE, L. R., 323-56, 324-28, 332, 334, 340, 344-48
- Squires, R. F., 14, 378
- Srivastava, B. I. S., 259
- Stables, D. F., 471
- Stachelin, R., 512
- Staiman, A., 87
- Stallcup, W. B., 168
- Stamney, T. A., 51
- Stampfer, M. R., 252
- Standert, F. G., 518
- Stanes, M. D., 327
- Stanford, N., 484
- Stanley, M., 368
- Stanton, E. J., 92, 93
- Stapf, O., 2
- Staples, R. E., 420
- STARKE, K., 7-30; 7, 9-14, 16-20
- Starr, M. S., 10, 11
- Stasiacki, P., 440
- Staon, W. B., 278
- Stäubli, W., 556, 559
- Stavorsky, J. M., 471
- Stedman, R. L., 153
- Steele, T. H., 278, 279
- Steele, V. E., 145
- Steer, M. L., 255
- Stefani, E., 183
- Stegs, T., 584
- Stegeman, J. J., 450
- Steger, R. W., 304
- Stein, D. G., 218, 219
- Stein, J. H., 271, 277
- Stein, L., 338, 340
- Stein, M., 520
- Stein, T. M., 87
- Stein, Z., 512
- Steinacker, A., 12
- Steinberg, D., 481
- Steinberg, G. M., 37
- Steinberg, R., 185
- Steinberger, E., 301
- Steiner, A. L., 114, 116, 122
- Steinland, O. S., 10
- Stenböck, F., 148, 151
- Stenberg, Å., 438
- Stenevi, U., 219
- Stenarud, P., 471, 473
- Stephan, R., 277
- Stephenson, A. H., 499
- Stephenson, P., 497
- Steppeler, A., 10
- Sterk, A. R., 68
- Stern, J. H., 91
- Stern, W. C., 470
- Sternberg, D. B., 332
- Sternor, J. H., 515
- Sternweis, F. C., 254, 257, 258
- Stevens, M., 242, 243
- Stevenson, I. H., 93, 94, 96
- Steward, A. R., 45
- Stewart, H. L., 407
- Stewart, M., 472
- Stich, H. F., 399
- Stieg, R. L., 464
- Stjärne, L., 10, 15, 20
- Stoclet, J. C., 467
- Stoeckel, K., 206, 207, 209, 216, 217, 221
- Stoffersen, E., 484
- Stohlmann, F. F., 512, 518, 534-36
- Stokes, G. S., 278
- Stokes, J. B., 273, 276
- Stokker, G. E., 268
- Stolman, S., 93, 95
- Stone, C. A., 471
- Stone, E. A., 361, 363
- Stone, K. J., 272
- Stone, T. W., 12, 185, 189, 190
- Stoner, G. D., 136, 137, 158, 406



## 640 AUTHOR INDEX

- Stoof, J. C., 10, 11  
 Stoppani, A., 581  
 Storb, R., 241-44  
 Storm-Mathisen, J., 170, 189, 190  
 Story, D. D., 14  
 Story, D. F., 10, 19, 21  
 Stote, R., 273, 279  
 Stote, R. M., 268, 270, 273, 279, 283, 284  
 Stoughton, R. B., 45, 48  
 Strand, J. C., 486, 488, 490  
 Strandberg, K., 71  
 Streaty, R. A., 379  
 Streifer, M., 473  
 Stripp, B., 579  
 Strobaugh, T. P., 267  
 Strober, S., 242  
 Stromme, J. H., 577, 579-81, 586, 588  
 Strong, C. G., 493  
 Strobe, E., 315  
 Struyker-Boudier, H. A., 466  
 Stuart, A., 464, 472  
 Stulzman, L., 579  
 Sturgill, T. W., 251, 254-56  
 Styles, J. A., 393, 394, 402, 403  
 Su, Y.-F., 380  
 Suda, K., 205-7  
 Sugimura, T., 393, 395, 400  
 Sugio, K., 450  
 Sugita, E. T., 39  
 Sugiyama, K., 67  
 Sugiyama, T., 425, 436  
 Suhara, K., 435, 436  
 Suki, W. N., 273, 278  
 Sulcman, M., 10, 19  
 Sullivan, T. J., 71, 72, 74, 75  
 Sulser, F., 361-63, 365  
 Sultato, L. G., 554, 556  
 Sumner, J., 580  
 Sun, F. F., 487, 488, 491, 495, 496  
 Sundberg, D., 301  
 Sunderman, F. W. Jr., 151, 153  
 Sundwall, A., 97  
 Sunshine, I., 123  
 Süss, R., 145  
 Susser, M., 512  
 Sutherland, E., 440  
 Sutherland, E. W., 467  
 Sutter, A., 215, 216, 218-20  
 Sutton, I., 98, 101  
 Suzman, M., 471  
 Suzuki, A., 38  
 Suzuki, K., 438  
 Suzuki, T., 191  
 Svendsgaard, N.-A., 465, 471  
 Svendsen, T., 587, 588  
 Svenneby, G., 168  
 Svennilson, E., 512  
 Svensson, J., 479, 481, 483, 487  
 Svensson, T. H., 360  
 Swanson, E. E., 84, 92, 93  
 Swarbrick, J., 49, 50  
 Swartz, C., 284  
 Swartz, S. L., 489  
 Swash, M., 329  
 Sweetman, B. C., 440  
 Swedin, G., 222  
 Sweeney, G. D., 554, 556  
 Sweetman, B. J., 490  
 Swenberg, J. A., 156, 399  
 Swift, T. J., 85, 91  
 Swintooky, J. V., 39  
 Sydbom, A., 71, 75  
 Syková, E., 182  
 Sylvester, P. W., 306  
 Sylvester, R. F. Jr., 232  
 Sylwester, P., 72  
 Synder, R., 440  
 Szabo, M., 309  
 Szczekliki, A., 495  
 Szentágothai, J., 182  
 Szerb, J. C., 11-16  
 Szutowicz, A., 215, 218  
 Szwarefart, B., 300
- T**  
 Tabakoff, B., 95, 96, 98, 100, 101, 371, 376  
 Tacquet, A., 280  
 Tada, T., 63  
 Tai, H.-H., 272  
 Takahara, H., 536  
 Takahashi, S., 93-96  
 Takayama, S., 395, 433  
 Takemasa, F., 450  
 Takemori, S., 435, 436  
 Takesue, S., 554, 555  
 Takeuchi, M., 400  
 Takeyasu, K., 375, 376  
 Talbot, S., 299  
 Talcott, R. E., 439, 440  
 Talemnik, J., 9  
 Tallman, J. F., 359, 360, 364  
 Talman, W. T., 191  
 Talwalkar, R., 271  
 Tamminga, C., 368  
 Tan, A. T., 176  
 Tan, C. T. C., 231  
 Tan, G. H., 38, 39  
 Tanaka, S., 512  
 Tanaka, T., 10, 14  
 Tang, S. W., 359, 373  
 Tangenelli, S., 11  
 Tannen, R. H., 448  
 Tannenbaum, G. S., 302, 313  
 Tannenbaum, J., 271, 272, 275  
 Tanner, R. H., 448  
 Tantawy, G., 512, 528, 532  
 Tao, L. C., 53  
 Tardent, P., 425  
 Tarfi, P., 121  
 Tarsy, D., 366, 367  
 Tarver, H., 579  
 Tasaka, K., 67  
 Tashiro, Y., 433, 554, 555  
 Tashjian, A. H., 305, 309  
 Tata, J. R., 554  
 Tateishi, M., 183  
 Tatematsu, M., 408  
 Tattersall, M. L., 74  
 Tatum, A. L., 92, 93, 95  
 Taube, H. D., 10, 18  
 Taubert, H. D., 300  
 Taylor, A. F., 588  
 Taylor, B. A., 447  
 Taylor, D. L., 370  
 Taylor, G. W., 74  
 Taylor, J. D., 515, 518, 534  
 Taylor, P. W. Jr., 211  
 Teas, G., 583  
 Tempero, K. F., 284  
 Templeton, A. C., 134  
 Ten Bruggencate, G., 185  
 Terasaki, W. L., 121  
 ter Braak, J. W. S., 512  
 Terenius, L., 333, 379  
 Terkel, J., 310  
 Ternaux, J. P., 11  
 Terner, C., 168  
 Terragno, A., 483, 492, 495, 497, 501, 502  
 Terragno, D. A., 489, 492, 493, 499, 500  
 Terragno, N. A., 482, 483, 486, 488-90, 492-95, 497-502  
 Terry, L. C., 214, 218  
 Terzolo, C. A., 183  
 Teuber, H. L., 346  
 Teutach, H. F., 554  
 Thalmann, I., 191, 281, 282  
 Thalmann, R., 191, 281, 282  
 Thames, M. D., 277  
 Thatcher, L. G., 240  
 Theodorou, A., 367  
 Theoharides, T. C., 67, 76  
 Théoleyre, M., 297  
 Thibault, J., 210, 211, 213, 214, 222  
 Thieme, R. E., 11  
 Thins-Sempoux, D., 554, 556  
 Thirk, G., 502  
 Thoa, N. B., 10, 14  
 THOENEN, H., 205-29, 205-18, 220-22  
 Tholey, G., 95  
 Thomas, A. J., 167, 171  
 Thomas, E. D., 241-44  
 Thomas, F., 575  
 Thomas, P. E., 436-38, 440, 452  
 Thomas, W. G., 281  
 Thompson, C. Z., 393, 399

- Thompson, H., 177, 178, 180  
 Thompson, J. A., 380  
 Thompson, J. W., 9  
 Thompson, L., 280  
 Thompson, R. H. S., 518  
 Thomson, T. D., 89  
 Thorell, J. I., 117  
 Thorgrinsson, S. S., 445, 446, 453  
 Thornberry, J. F., 183, 362, 363  
 Thornburg, J. E., 366, 370  
 Thorogood, P., 484  
 Thuillier, G., 268  
 Thuillier, J., 268  
 Thurber, L., 471  
 Ticku, M. K., 90  
 Til, H. P., 157  
 Timbrell, V., 147  
 Timm, E., 528, 532  
 Timmons, P. R., 514, 515, 524, 528, 532, 533  
 Timset-Berthied, M., 337  
 Tinklenberg, J. R., 329-31  
 Tippins, J. R., 74  
 Titeler, M., 357  
 Titus, E., 211  
 Tixier-Vidal, A., 306  
 Tkeshelashvili, L. K., 404  
 Tobler, C., 298, 304  
 Toda, M., 153  
 Tolken, E. B., 147  
 Tolson, N., 208, 218  
 Tomasi, V., 483  
 Tomaszewski, J. E., 395, 401  
 Tomatis, L., 134, 393, 399, 401, 407  
 Tomicka, H., 64  
 Tomkins, G. M., 252, 255  
 Tomlinson, B. E., 329  
 Tomlinson, E., 44  
 Tompeit, S. L., 588, 589  
 Tong, C., 400, 401  
 Tong, G. L., 43, 48, 49, 53  
 TOPPING, D. C., 133-63; 145, 147, 148, 153-55  
 Torda, T., 314  
 Torres de Toledo e Souza, I., 117  
 Torronen, R., 587, 588  
 Toru, M., 367  
 Tosk, J., 395, 401  
 Toustellotte, W. W., 370  
 Trabucchi, M., 372, 606, 607  
 Train, K., 331  
 Travers, P. R., 512  
 Tredger, J. M., 445  
 Treherne, J. E., 48  
 Treiser, S., 360, 363, 364, 368  
 Trenkner, E., 425, 426  
 Triesenberg, H. J., 367  
 Trizna, W., 270, 275  
 Troen, P., 301  
 Trosko, J. E., 395  
 Truitt, E., 582  
 Truitt, E. B., 582, 583, 588  
 Truitt, R. L., 243  
 Trulson, M. E., 374  
 Trump, B. F., 158  
 Truneh, A., 67, 69, 76  
 Tsafiri, A., 301  
 Tsuji, H., 98, 100, 436, 437, 440  
 Tsukada, Y., 168  
 Tsunoo, A., 12  
 Tsurufuji, S., 430  
 Tuff, L., 369  
 Tulloss, T. C., 512  
 Tuneak, A., 440  
 Tuohy, J. H., 91  
 Tuomisto, J., 314  
 Turi, J., 38  
 Turkana, S. A., 89  
 Turkelson, C., 299  
 Turley, L. A., 512  
 Turnbull, M. J., 10, 11, 18, 93-100, 170  
 Turner, J. E., 218, 219, 222  
 Turok, M., 146  
 Twiss, D. F., 575  
 Twitchin, B. J., 169, 180, 181, 184  
 Twohy, C. P., 310, 314, 315  
 Tyler, W. P., 588  
 Tyndall, R. L., 448  
 Tzeng, S. F., 90, 98, 101
- U
- Uchida, S., 375, 376  
 Ueno, Y., 281  
 Ulrich, V., 436, 437, 440  
 Umeda, I., 183  
 Umezawa, K., 433  
 Udenfriend, S., 581  
 Underwood, E. E., 550  
 Ungerstedt, U., 313  
 Unsicker, K., 212, 213  
 U'Prichard, D. C., 14, 358-62, 365, 373, 377  
 Upshall, D. G., 35, 36, 38, 45, 55  
 Urban, I., 336, 338  
 Ursillo, R. C., 359, 360, 365  
 Ustategui-Gomez, M., 130  
 Urdin, T., 360, 367  
 Using, H. H., 33, 34  
 Utiger, R., 114  
 Utiger, R. D., 114, 116, 121, 304, 305  
 Uvnäs, B., 71  
 Uzuki, F., 440  
 Uzunov, P., 367
- V
- Vaca, K. W., 189, 190  
 Vaino, H., 395  
 Vale, W., 296, 302, 304, 305, 307  
 Vale, W. W., 338  
 Valeriotte, F. A., 232  
 Valette, G., 45  
 Vallee, B., 580  
 Valzelli, L., 468  
 Van Bekkum, D. W., 242  
 van Bergen, F. H., 17  
 van Bogaert, M. D., 440  
 van Buskirk, R., 334, 336, 340-42, 344  
 van de Poll, K. W., 395, 403  
 Vander, A. J., 271  
 van der Hem, G. K., 493  
 van der Hoeven, T. A., 436, 445  
 Vanderlinde, R., 580  
 Vandewiel, R., 299  
 Van Duuren, B. L., 135, 146, 153  
 Van Dyke, H. B., 94  
 Van Dyke, R. A., 440  
 Vane, J. R., 479, 481-87, 489-91, 493, 495, 501  
 Van Eys, J., 235  
 van Kalfeshoten, A. A., 333  
 VanNess, P., 90  
 Van Orden, D. E., 271  
 Van Os, G. A. T., 32  
 van Ree, J. M., 12, 338  
 van Riezen, H., 334, 335  
 van Strik, R., 93  
 Van Vugt, D. A., 306, 310, 312, 313  
 van Wimersma Greidanus, T. B., 335, 336  
 Van Zee, B. E., 280  
 Vapaatalo, H., 440, 473  
 Vardi, Y., 473  
 Varmuza, S. L., 369  
 Varon, S., 205, 206, 208-10, 215, 216  
 Vasak, V., 585  
 Vasquez, B. J., 335, 338, 340, 343, 347, 372, 375, 377  
 Vassanelli, P., 94, 440  
 Vassar, H. B., 466  
 Vatner, S. F., 493  
 Vaughan, M., 481, 501  
 Vaught, J. B., 448  
 Vedin, J. A., 284  
 Velly, J., 277  
 Velumian, A. A., 181, 182  
 Vermilion, J. L., 432, 433  
 Vernon, C. A., 205-7, 210, 211, 217, 220, 221  
 Veronesi, B., 512

## 642 AUTHOR INDEX

- Vertes, V., 284  
 Verzosa, M., 231  
 Vesell, E. S., 554, 556, 587  
 Vetulani, J., 361-63  
 Vial, J. D., 584  
 Vij, S., 513, 515; 517, 526, 527  
 Vijayan, E., 311  
 Vilchez-Martinez, J., 301  
 Villa, S., 179, 181  
 Villani, G., 399  
 Vinay, P., 269, 270, 272, 274, 278, 279  
 Vincent, R., 134  
 Vincent, S. R., 168, 170, 177, 178, 180, 187, 189  
 Vinh Tan Tran, 190  
 Viewanathan, T., 443  
 Vizi, E. S., 9-12, 16, 17  
 Vogler, L. B., 235, 237  
 Vogt, W., 482  
 von Bahr, C., 588  
 von Euler, U. S., 21, 480, 485  
 Von Schultz, O. E., 53  
 Vouvoigtlander, P. F., 367  
 von Wartburg, J. P., 588, 589  
 Vora, D. D., 512  
 Vorburger, C., 284  
 Vrijmoed-de Vries, M. C., 11  
 Vyklicky, L., 182  
 Vyskočil, F., 12  
  
 W  
 Waaijers, H. W., 395, 403  
 Waal-Manning, H. J., 277, 283  
 Waddell, W. J., 84, 93  
 Waddingham, S., 93, 95, 96, 98, 99, 102  
 Waddington, J. L., 367  
 Wade, D. M., 74  
 Wagner, G. C., 370  
 Wagner, H., 4  
 Wagner, H. R., 364, 366  
 Wagner, J. C., 147  
 Wahl, R. C., 280  
 Wahlstrom, G., 84, 93, 95-99, 376  
 Wajchenberg, B. L., 117  
 Wakabayashi, I., 303  
 Wakabayashi, T., 479, 483  
 Wakade, A. R., 10  
 Wakade, T. D., 10  
 Wakeford, R. J., 425  
 Walaa, I., 187, 189  
 Walburg, H. E. Jr., 141  
 Waldock, B., 334  
 Walk, R. A., 272, 274  
 Walkenhorst, W. G., 495  
 Walker, J., 12, 187, 189  
 Walker, P., 304  
 Walker, W. G., 277  
 Walker, W. H. C., 121  
 Waller, M. B., 88, 89  
 Wallerstein, R. S., 576  
 Walsh, M., 583  
 Walsh, T. J., 340, 342, 343  
 Walters, J. A., 140  
 Walters, J. R., 360, 372  
 Walther, K. M., 512  
 Walton, R. P., 43  
 Wan, S. H., 51  
 Wandscheer, D., 10, 13  
 Wang, C. H., 359, 361  
 Wang, H. H., 497  
 Wang, H. S., 472  
 Wang, P. H., 36, 37, 46  
 Wang, R. Y., 466, 467  
 Wang, S. J., 190  
 Wang, Y.-J., 85  
 Wanson, J.-C., 554  
 Ward, D., 89  
 Ward, E., 134  
 Ward, K. H., 167  
 Wardeh, G., 10-12  
 Warkentin, P., 244  
 Warnack, W., 360  
 Warner, C. R., 588  
 Warner, M., 435  
 Warner, M. B., 259  
 Warren, R. L., 281  
 Warren, S. T., 395  
 Warwick, G. P., 148  
 Washington, J. A. II, 55  
 Wassermann, O., 513  
 Watanabe, K., 297, 298  
 Watanabe, S., 367  
 Waterfield, A. A., 380  
 Waterhouse, D. D., 345  
 Waters, E. M., 512  
 WATKINS, J. C., 165-204; 165-69, 171-81, 184, 185, 188, 191  
 Watkins, J. W., 93  
 Watson, D., 124  
 Watson, J. T., 490  
 Watson, L. S., 267, 268, 279, 280  
 Wattenberg, L., 586  
 Wattenberg, L. W., 138  
 Watta, A. D., 10  
 WAY, E. L., 605-13; 379, 605, 607  
 Weatherall, M., 466  
 Weaver, M. M., 92, 93  
 Webb, W. W., 63  
 Weber, J. E., 569  
 Weber, M. L., 512  
 Weber, P. C., 272, 277, 488, 493-95  
 Weber, R. B., 464  
 Weber, W. W., 448  
 Webster, G. W., 425, 426  
 Webster, H. D., 517  
 Webster, R. A., 191  
 Weeks, C. E., 154  
 Weeks, J. R., 500  
 Wehking, E., 10, 15  
 Wehr, T. A., 368  
 Weibel, E. R., 550, 552, 554, 556, 559  
 Weiden, P. L., 242-44  
 Weiherer, S., 273, 279, 283  
 Weiler, C. T., 168, 187  
 Weinberger, S. B., 361, 370  
 Weiner, I. M., 55, 277-79  
 Weiner, M., 587  
 Weiner, N., 10, 20  
 Weiner, R., 492, 500  
 Weiner, R. I., 296, 306, 307, 314, 368  
 Weiner, W. J., 361, 367, 368, 370, 372  
 Weingartner, H., 330, 337, 344  
 Weinberger, G., 11, 13, 15  
 Weinman, E. J., 274, 278  
 Weinstein, H. J., 237  
 Weinstein, I. B., 395  
 Weinstock, J., 278  
 Weinstock, M., 10, 14  
 Weisburger, E. K., 398  
 WEISBURGER, J. H., 393-416; 394-99, 404-7, 409, 411  
 Weisenberger, J., 586  
 Weisman, M. N., 582  
 Weiss, B., 344, 363  
 Weiss, J. M., 336  
 Weitzell, R., 10  
 Weitzman, R. E., 259  
 Weksler, B. B., 484  
 Welch, A. D., 91  
 Welch, K. M. A., 464, 471, 473  
 Wells, A., 440  
 Wells, C. E., 91  
 Welton, A. F., 75  
 Wenger, H. C., 471  
 Wenthold, R. J., 167, 189-91  
 Werder, E. A., 259  
 Wering, L. L., 88, 89  
 Werman, R., 167, 170, 183, 191  
 Wesche, D. L., 21  
 Wessella, N. K., 215  
 Wessler, I., 11, 13  
 Wesson, D. R., 83  
 West, B. A., 281  
 West, N. R., 209  
 West, S. B., 437, 440, 452  
 Westerfeld, T. V., 580  
 Westfall, T. C., 10, 11, 17  
 Westley, J., 370  
 Westmoreland, B. F., 89  
 Westwood, F. R., 393, 394, 402, 403  
 Wetzel, C. D., 344, 345

- Wheal, H. V., 172, 174-76, 185, 189  
 Wheaton, J., 297  
 Wheeler, D. D., 168  
 Whitacre, D. M., 515  
 White, J. M., 576, 587  
 White, J. R., 67, 69  
 White, P., 329  
 White, R., 436  
 White, R. A. Jr., 440  
 White, R. E., 432  
 White, W. F., 189, 190, 301  
 White, W. G., 515  
 Whiteley, A., 330  
 Whitlock, E., 130  
 Whitmire, C. E., 157  
 Whittaker, N., 487  
 Whorton, A. R., 272, 277, 495  
 Whyatt, P. L., 91  
 Wibo, M., 554, 556, 561  
 Wickelgren, W. D., 182  
 Wicklmayr, M., 492  
 Widnell, C. C., 554, 556  
 Wiebelhaus, V. D., 278  
 Wiecek, N. L., 359, 360, 365  
 Wiegreb, W., 588  
 Wiener, J., 554, 556  
 Wieraszko, A., 177, 190  
 Wiethold, G., 469  
 Wightman, R. M., 315  
 Wiklund, L., 206, 210, 211, 220, 222  
 Wiklund, R. A., 251  
 Wikvall, K., 437  
 Wilbrandt, W., 33, 34  
 Wilcox, W. S., 232  
 Wild, J. M., 466  
 Wildt, L., 297  
 Wilhelm, D. L., 140  
 Wilhelmsson, C. E., 284  
 Wilkin, G. P., 498  
 Wilkinson, M. I. P., 466, 469  
 Will, J. C., 336  
 Williams, A. E., 588  
 Williams, G. H., 489  
 WILLIAMS, G. M., 393-416; 394-401, 403-5, 407-9  
 Williams, I. E. I., 329  
 Williams, J. T., 12, 15  
 Williams, M. A., 550, 552  
 Williams, M. H., 521  
 Williams, M. L., 138, 140, 141  
 Williams, R. T., 94, 577  
 Williams, T., 297  
 Williamson, D., 145  
 Williamson, H. E., 271  
 Williamson, M. A., 486, 488  
 Willing, G. W., 124  
 Willow, M., 87  
 Wilner, K. D., 370  
 Wilson, A., 576  
 Wilson, J. G., 423  
 Wilson, N. H., 501  
 Wilson, T. W., 490  
 Wilson, W. W., 582  
 Windsor, B. L., 301  
 Winer, N., 495  
 Wing, L. M. H., 466  
 Wingham, D. G., 51  
 Winokur, A., 304, 305  
 Winterith, M., 95  
 Wirz-Justice, A., 368, 374  
 Wise, C. D., 340  
 Wiseman, A., 450  
 Wisniewsky, T. I., 270  
 Witherspoon, R., 243  
 Witschi, H. F., 145  
 Witter, R. F., 522-24, 530  
 Witzleben, H., 33  
 Wojtowicz, J. M., 177  
 Wojtulewski, J. A., 482  
 Wolbach, S. B., 138, 140  
 Wolf, C. R., 436  
 Wolf, G. L., 271  
 Wolfe, B. B., 361-63  
 Wolff, H. G., 465, 466  
 Wolff, J. A., 232  
 Wolff, S., 393, 402  
 Wolford, J. L., 259  
 Wolterdorf, O. W. Jr., 265-68, 272, 280  
 Wong, D. T., 379, 467  
 Wong, P. S. L., 44  
 Wong, P. Y. D., 610  
 Wong, P. Y.-K., 488, 491, 495, 496, 500, 501  
 Wong, Y.-C., 138, 140  
 Wong, Y.-W., 369  
 Wood, A. J., 277, 283  
 Wood, A. W., 447  
 Wood, P., 12  
 Wood, P. L., 189  
 Wood, P. M., 217, 218  
 Wood, W. C., 84  
 Woodbury, D. M., 91  
 Woodhams, P. L., 183  
 Woodhouse, D. L., 92, 93  
 Woods, L. F. J., 450  
 Woods, M., 235, 236  
 Woods, W., 244  
 Woodward, D. J., 345  
 Worden, A. N., 534-36  
 Worden, F. G., 187  
 Work, J., 271  
 Worms, P., 369  
 Woxen-Opahl, M., 189  
 Wright, E. C., 140  
 Wright, P. L., 530, 534-37  
 Wright, R. R., 586  
 Wurtman, R. J., 311, 329  
 Wuster, M., 380  
 Wuttke, W., 311  
 Wyatt, R. J., 378  
 Wyche, A., 501  
 Wynder, E. L., 133, 146  
 Wyngaarden, J. B., 278  
 X  
 Xintaras, C., 512  
 Y  
 Yagi, H., 446  
 Yahagi, T., 400  
 Yalow, R. S., 114, 609  
 Yamada, H., 39  
 Yamada, T., 313  
 Yamaguchi, N., 10  
 Yamakawa, H., 280  
 Yamamoto, C., 169, 191  
 Yamamoto, I., 87, 93, 95, 96  
 Yamamoto, K. R., 252  
 Yamamoto, R. S., 407  
 Yamamoto, S., 483  
 Yamamoto, T., 120  
 Yamamura, H. I., 14, 177, 180, 359, 360, 365, 375-77  
 Yamamura, Y., 183  
 Yamasaki, T., 436  
 Yamasaki, E., 400  
 Yamasaki, H., 67  
 Yanagita, T., 93-96  
 Yanai, J., 95, 96, 98, 100, 101  
 Yanaihara, T., 301  
 Yarbrough, G. G., 377  
 Yaria, T., 139, 151  
 Yasuda, N., 306  
 Yasujima, M., 482  
 Yen, S. S. C., 300, 302, 311  
 Yesavage, J. A., 330  
 Yim, C. Y., 341  
 Yim, G. K. W., 440  
 Yodaiken, R. E., 587  
 Yoshida, H., 14, 375, 376  
 Yoshida, K., 301  
 Yoshida, Y., 433  
 Yoshihara, S., 440, 445  
 Yoshimi, T., 313  
 Yoshimura, H., 440, 445  
 Yoshinaga, K., 482  
 Youdim, M. B. H., 464  
 Young, A. B., 190  
 Young, D. S., 284  
 Young, J., 88  
 Young, J. Z., 516, 517  
 Young, M., 206  
 Yu, M. W., 208  
 Yu, S.-C. T., 85  
 Yu, T. F., 278  
 Yules, R. B., 281  
 Yusko, S. C., 166  
 Yowler, A., 470

# 644 AUTHOR INDEX

## Z

- Zacchei, A. G., 269, 270, 275, 280
- Zacherle, B. J., 277
- Zaczek, R., 187
- Zahn, T. P., 344
- Zaimis, E., 208, 211, 212
- Zakheim, R. M., 271
- Zakour, R. A., 404
- Zan-Bar, I., 242
- Zarifhan, E., 364
- Zeligs, M. A., 512
- Zendzikovski, S., 585
- Zervos, C., 397, 404
- Zianco, R. J., 10
- Ziegler, D. K., 464, 472
- Ziegigänsberger, W., 10, 15, 181, 185, 377, 379
- Zigler, J. S., 166
- Zillner, D. A., 338
- Zimmerman, B. G., 10, 17
- Zimmerman, E., 299
- Zimmerman, R. L., 336
- Zimmermann, A., 215, 216, 218-20
- Zingg, H. H., 304
- Zina, G. R., 272, 274
- Zia, A. P., 341
- Zinapel, N., 167
- Zor, U., 301, 473
- Zornetzer, S. F., 339, 341, 345, 346
- Zuelzer, W. W., 240
- Zumstein, A., 10-13
- Zurgil, N., 167
- Zusman, R. M., 490
- Zweier, J. L., 448
- Zwickey, R. E., 528, 532, 534

# SUBJECT INDEX

## A

### A23187

- and histamine secretion, 67, 69-71, 73, 75-76

### Acetazolol

- and migraine studies, 471

### Acetaldehyde

- and disulfiram-ethanol reaction, 582-84
- in lung cancer studies, 156-57

### Acetamide

- and carcinogen testing, 411

### Acetaminophen

- vs aspirin
- in anti-inflammation action, 612

### Acetanilide

- and P-450 induction, 451

### Acetohexamide

- renal aspects of, 278

### Acetonemia

- disulfiram-induced, 585-86

### Acetylcholine (ACh)

- effects of barbiturates on, 88-89, 97-99
- and excitatory amino acids, 166-67, 171-72, 176-77
- histamine releasing action of, 76
- and hypothalamic hormone release, 307-9, 313-14
- and neurobiology of memory, 326-31, 345
- and presynaptic receptors, 9, 11, 13, 16-18

### Acetylcholinesterase

- and barbiturate tolerance and dependence, 98-99
- inhibition of
- and delayed neurotoxicity, 511, 518, 521, 533
- and memory studies, 329

### Acidic drugs

- colonic absorption of, 41

### Acid phosphatase

- and delayed neurotoxicity, 520

### Acrolein

- in lung cancer studies, 156

### ACTH (Adrenocorticotropin)

- and corticotropin releasing factors, 306
- and hypothalamic hormone release, 314-15
- and location of LHRH, 298
- and memory studies, 333-37, 345-47
- as neuropeptide, 606

- and P-450 induction, 438
- and prostaglandin action, 481

### Acute lymphocytic leukemia

- in childhood, 231-46
- bone marrow transplantation, 241-44
- CNS leukemia, 244-45
- more effective chemotherapy, 238-41
- subclassification, 234-38
- therapeutic advances, 232-34

### Acyldiolases

- and prostaglandin biosynthesis, 482

### Adenosine

- as presynaptic receptor, 10-12, 18, 22

### Adenosine arabinoside

- in treating childhood ALL, 239

### Adenosine diphosphate (ADP)

- in immunoassay studies, 122

### Adenosine monophosphate

- (5'-AMP)

- in immunoassay studies, 122

### Adenosine phosphorothioate

- and histamine secretion, 75

### Adenosine triphosphate

- and carcinogen testing, 407

### Adenosine triphosphate (ATP)

- in immunoassay studies, 122

### S-Adenosyl-L-methionine

- and histamine secretion, 72

### Adenylate cyclase

- genetic mutation studies, 251-61
- functions of N-protein, 254-55
- N deficiency in cycS49 cells, 252-54

### pseudohypoparathyroidism

- 258-60

- and LHRH studies, 301

- and prostaglandin synthesis, 501

- and receptor adaptations, 361-69, 372, 380

### Adenyl cyclase

- renal aspects of, 275, 282

### Adrenaline (Epinephrine)

- and presynaptic receptors, 8, 10, 18

- see Epinephrine

### $\beta$ -Adrenergic amines

- and adenylate cyclase studies, 252, 255-56

### Adrenergic neurons

- effect of nerve growth factor on, 211-12

### $\alpha$ -Adrenergic receptors

- adaptations to centrally acting drugs, 358-60
- antidepressants, 359-60
- miscellaneous drugs, 360
- and hypothalamic hormone release, 313
- and presynaptic receptor studies, 10-11, 14-15, 17, 21-22

### $\beta$ -Adrenergic receptors

- adaptations to centrally acting drugs, 361-66
- agonists, 361
- antidepressants, 361-65
- miscellaneous drugs, 365-66

- and adenylate cyclase mutations, 253-56

- and barbiturate dependence, 99

- and histamine secretion, 75

- as presynaptic receptor, 10, 16, 19, 21

- renal aspects of, 277

### Adrenergic system

- in migraine attack, 468

### Adrenocorticotropin

- see ACTH

### Aflatoxin B<sub>1</sub>

- and carcinogen testing, 403, 409, 411

### Aflatoxins

- and P-450 induction, 444, 453

### Air pollution

- as respiratory carcinogen, 133, 143, 155-57

### Alcohol

- compared with barbiturate effects, 83

### Alcoholism

- disulfiram treatment, 575-76, 580-81, 583-84
- and receptor adaptation studies, 366

### Alcohols

- aliphatic
- epidermal penetration of, 45-49

### Aldehyde dehydrogenase

- and disulfiram metabolism, 579-81, 583, 588

### Aldehyde oxidase

- and disulfiram actions, 580-81

### Aldehydes

- in lung cancer studies, 156-57
- Aldolases**  
and disulfiram inhibition, 581
- Aldosterone**  
and prostaglandin action, 499
- Aliphatic aromatic phosphorus esters**  
and delayed neurotoxicity tests, 527-33  
NMDA receptors, 172  
other antagonists, 176-77  
other excitants, 175-76  
pharmacology of receptors, 171-81  
quisqualate and kainate receptors, 172-74  
regional distribution of amino acids and enzymes, 166-67  
release, 170-71  
transmitter identification, 185  
uptake/inactivation, 167-70
- Amino acid transport system**  
and S-A relationships, 41
- D-α-Aminoadipate (DAA)**  
and amino acid transmitters, 169, 172-73, 178-79, 184-85, 189-91
- L-α-Aminoadipate**  
and amino acid transmitters, 176
- Aminobenzoic acid**  
ototoxicity of, 283
- γ-Aminobutyrate**  
alterations during migraine attacks, 464
- γ-Aminobutyric acid**  
see GABA
- para-Amino-clonidine**  
and receptor adaptations, 358-59
- p-Aminohippurate**  
and renal excretion, 55
- p-Aminohippuric acid**  
renal aspects of, 269, 272, 278
- Aliphatic phosphorus esters**  
and delayed neurotoxicity, 515, 522-27
- Alkylnitrosoureas**  
as carcinogens, 406, 409
- Alprenolol**  
and migraine studies, 471
- Alzheimer's disease**  
and memory studies, 328-30
- Amides**  
absorption of, 40
- Amine oxidase**  
and disulfiram action, 580
- Amineptine**  
and prolactin levels, 309
- Amines**  
and drug metabolism, 53-54  
and P-450 induction, 435, 438
- Amino acid transmitters**  
excitatory, 165-92  
agonists, 181-84  
amino acid receptors in synaptic excitation, 184-85  
binding studies, 177-81  
depressant actions, 177  
L-glutamate and L-aspartate action, 174-75  
lesion studies, 186-88  
mechanisms of action, 181  
neurochemistry, 166
- α-Amino-3-hydroxy-5-methylisoxazolepropionic acid (AMPA)**  
and amino acid transmitters, 176
- 3-Amino-1-hydroxy-2-pyrrolidone (HAP)**  
and amino acid transmitters, 169, 173, 179, 189-90
- Aminooxyacetic acid (AOAA)**  
and barbiturate dependence, 100-1
- 2-Amino-5-Phosphonopentanoate (APV)**  
and amino acid receptors, 172-73, 185-86, 188, 190-91
- Aminopyrine**  
and P-450 induction, 439-40, 444
- D-α-Aminosuberate (DAS)**  
and amino acid transmitters, 173, 179, 190-91
- Amisulpride**  
and amino acid actions, 177  
effects on receptor binding, 359, 365, 373  
in migraine treatment, 464-65, 470, 472
- Amnesia**  
and pharmacology of memory, 326-28, 331-32, 334, 341, 343, 345-46, 348
- Amobarbital**  
and brain membrane action, 86  
tolerance and dependence studies, 93
- Amphetamine**  
effects on receptor binding, 360-61, 365, 369-70, 372-73  
interaction with disulfiram, 587
- dl-4-OH-Amphetamine**  
in memory studies, 343
- Amphetamines**  
in memory studies, 343-44
- Analeptics**  
lack of buccal absorption, 43
- Androgens**  
buccal absorption of, 43
- Anesthesia**  
surgical  
recent reviews, 612
- Angiotensin**  
as neuropeptide, 606
- Angiotensin II**  
as presynaptic receptor, 10-12, 15-17  
and prostaglandin action, 489, 491, 494, 498, 502
- Angiotensin-converting enzyme**  
and prostaglandin synthesis, 500-1
- Angiotensins**  
and prostaglandin action, 482, 488-89, 493-94, 496, 499, 502
- Anhydrohydroxyprogesterone**  
buccal absorption of, 43
- Aniline**  
absorption of derivatives, 40  
and P-450 induction, 444, 447
- Anthracenes**  
and P-450 induction, 434, 449
- 2-Anthramine**  
as carcinogen, 406
- Antibiotics**  
diffusion into prostatic fluid, 51
- Anticholinergic drugs**  
and memory studies, 326
- Anticholinesterases**  
and receptor adaptations, 375
- Anticonvulsant effects**  
of barbiturates, 84
- Antidepressants**  
effects on receptor binding, 359-65, 372-73
- Antidepressant therapy**  
and migraine studies, 472
- Antidiuretic hormone**  
in pseudohypoparathyroidism, 259-60
- Antigen/antibody labeling**  
see Radioimmunoassay
- Antigens**  
and antibodies  
and P-450 induction, 451-52  
see Hypersensitivity
- Antihypertensive activity**  
relationship of POA acid structure to, 284
- Anti-IgE**  
and phospholipids



- in hypersensitivity control, 71-72
- Antimycin A
  - and histamine secretion, 72
- Antipyrine
  - interaction with disulfiram, 587
- Apomorphine
  - buccal absorption of, 43
  - and hypothalamic hormone release, 309, 311-14
  - and presynaptic receptors, 609
  - and receptor adaptation studies, 369-72
- Aprotinin
  - and prostaglandin action, 499
- Arachidonic acid
  - and hypersensitivity studies, 73-75
  - renal aspects of, 271-72, 275
- Arachidonic acid metabolites
  - prostaglandins and prostacyclin, 479-503
- Arecholine
  - and memory studies, 330
- Arenobufagin
  - early studies of, 4
- Arginine-8-vasopressin (AVP)
  - and memory studies, 336
- Aromatic amino acid
  - decarboxylase
  - and Alzheimer's disease, 329
- Aromatic hydrocarbons
  - and P-450 induction, 440-46
- Arthritis
  - and prostaglandins, 482
- Arylamines
  - as carcinogens, 398, 406-7, 409-10
- Aryl phosphorus esters
  - and delayed neurotoxicity, 538-39
- Asbestos
  - as respiratory carcinogen, 133, 143-44, 146-48, 151, 157
- Asparaginase
  - in treating acute lymphocytic leukemia, 232-33, 238-39, 241
- D-Aspartate
  - and amino acid transmitters, 166, 168, 170, 177-78, 180, 187
- L-Aspartate
  - and excitatory amino acid transmitters, 166-69, 171, 174-76, 178-81, 186-88
- N-(phosphonacetyl)-Aspartate
  - in treating childhood ALL, 241
- Aspartate amino transferase (AAT)
  - regional distribution of, 167
- Aspirin
  - and cyclooxygenase inhibition, 483-84
  - and hypersensitivity, 74
  - and teratology screening, 418, 420, 425-26
- Atherosclerosis
  - and prostaglandins, 484, 501
- Atropine
  - and barbitol tolerance, 97
  - and hypothalamic hormone release, 309
  - lack of buccal absorption, 43
  - in presynaptic receptor studies, 17
  - and receptor adaptations, 375-76
- 5-Azacytidine
  - and treatment of acute lymphocytic leukemia, 239
- 8-Azaguanine
  - in carcinogen testing, 400
- 8-Azahypoxanthine
  - in treating acute lymphocytic leukemia, 239
- B
  - Baclofen [3-(*p*-chlorophenyl)-GABA]
    - and amino acid transmitters, 169-71
  - Bacterial mutagenesis
    - in carcinogen testing, 400
  - Barbital
    - interaction with disulfiram, 587
    - mechanism of action, 84, 92-93, 96-100
  - Barbiturates
    - colonic absorption of, 41
    - and drug metabolism, 53
    - electrophysiological effects of, 83
    - gastric absorption of, 35
    - lack of buccal absorption, 43
    - mechanism of action, 83-103
    - calcium role, 86-87
    - experimental approaches, 83-85
    - ions in tolerance and dependence, 102-3
    - macromolecules and CNS effects, 91
    - membrane lipids in tolerance and dependence, 101-2
    - neurotransmitter mechanisms, 87-91, 97-101
  - perturbation of membrane physical properties, 85-86
  - protein synthesis in tolerance and dependence, 102
  - synaptic transmission effects, 87-91
- Bicuculline
  - and dopamine release, 18
- Biliary excretion
  - and physicochemical properties, 55-56
- Binding studies
  - of excitatory amino acids, 177-81
- Bioassay
  - in carcinogen testing, 405-9
- Biogenic amines
  - and disulfiram action, 583
- Biotransformation
  - of barbiturates, 94
  - of diuretics
    - relationship of POA acid structure to, 269-70
- 4-Biphenylamine
  - and carcinogen testing, 411
- Birth defects
  - genetic differences in
    - and P-450 induction, 441, 443, 449
- Bis(chloromethyl)ether
  - as carcinogen, 406
- Blood-brain barrier
  - drug penetration of, 52
  - and treatment of acute lymphocytic leukemia, 233
- Bombesin
  - and hypothalamic hormone release, 307
  - tolerance and physical dependence, 92-103
  - and P-450 induction, 439
  - and receptor adaptation effects, 376-77
- Barbituric acid
  - structure of, 91
- Basophils
  - in hypersensitivity control, 63-64, 67, 70-71, 75
- Benz(a)anthracene
  - and carcinogen testing, 411
- Benzene
  - absorption of various derivatives, 39
- Benzidine residue
  - as carcinogen, 398
- Benzodiazepin receptors
  - adaptations of centrally acting drugs, 378-79
- Benzodiazepines
  - as presynaptic receptor, 11-12

- Benzolamide**  
renal aspects of, 271
- Benzomethamine**  
absorption of, 37
- Benzo(a)pyrene**  
as carcinogen, 136, 140, 144,  
149-50, 154-56, 158  
and carcinogen testing, 403,  
408, 411  
and P-450 induction, 433-34,  
440, 443-44, 449, 451
- Benzo(e)pyrene**  
as cocarcinogen, 153-55
- Bone marrow transplantation**  
in treating childhood ALL,  
241-44
- Bradykinin**  
and prostaglandin studies,  
491-92, 498-501
- Brain opiates**  
and hypothalamic hormone  
release, 307, 310, 312
- Brain protein synthesis**  
and memory, 325, 331-33,  
345
- Breast cancer**  
induction in rats  
and carcinogen testing,  
407, 409
- Bromocriptine**  
and receptor adaptation  
studies, 369
- Bromodeoxyuridine (BUDR)**  
in carcinogen screening,  
400
- Bromocriptine**  
and hypothalamic hormone  
release, 314
- 4-Bromohomobutenate**  
and amino acid transmitters,  
176
- Bronchitis**  
in lung cancer studies, 140
- Buccal absorption**  
and structure-activity  
relationships, 43-44
- Bufadienolide**  
early studies of, 4
- Bumetanide**  
structure-activity  
relationships, 277, 283
- Butylated hydroxytoluene**  
and lung cancer studies,  
145-46
- Butyrophonones**  
and receptor adaptation  
studies, 366
- Butyrylcholinesterase**  
and delayed neurotoxicity,  
518, 520-21, 533
- BW 557**  
and histamine secretion, 74
- C**
- Caffeine**  
and migraine treatment, 464,  
467-68, 470
- Calcium**  
role in barbiturate actions,  
86-87, 89, 102-3  
role in histamine secretion,  
67-72, 76  
role in pseudohypo-  
parathyroidism, 260-61
- Calcium ions**  
and amino acid transmitters,  
170, 178, 182-83, 187  
and immunoassay studies,  
122
- Cancer therapy**  
disulfiram in, 586
- Carbamates**  
gastric absorption of, 35-36  
renal excretion of, 55
- Carbon disulfide**  
and disulfiram neuropathies,  
584-85
- Carboxylic acids**  
biliary excretion of, 55
- Carcinogen testing**  
decision point approach,  
393-412  
battery results, 403  
chemical structure, 397-98  
chronic bioassay, 408-9  
criteria for battery, 394-95  
in vitro short-term tests,  
398-405  
in vivo bioassays, 405-8  
quantitative aspects,  
410-12
- Cardinoline**  
early studies of, 4
- Catecholamine**  
and disulfiram action, 581  
and nerve growth factor  
effects, 208-9, 211, 218  
release  
and presynaptic receptors,  
609  
renal aspects of, 277
- Catecholamines**  
depletion of with metyrosine,  
598  
and hypothalamic hormone  
release, 308-9, 314-15  
and memory studies, 332,  
339-45, 347  
and pentobarbital interaction,  
90  
and presynaptic receptors,  
8-9, 14  
and prostaglandin action,  
481-82  
and receptor adaptations, 364
- Cell transformation**  
and carcinogen testing, 402
- Central nervous system**  
see CNS
- Cerubidine**  
see Daunorubicin
- Chemotactic factors**  
and hypersensitivity, 63
- Chemotherapy**  
in acute lymphocytic  
leukemia, 231-46  
use of marijuana and THC  
in, 611
- Chinese herbal medicine**  
pharmacological studies of,  
2-6
- Chloramine T**  
as labeling agent, 166-17
- Chlorodecane**  
and P-450 induction, 449
- Chlordiazepoxide**  
and disulfiram interaction,  
587
- Chloride transport**  
and diuretic S-A  
relationships, 273,  
276-77
- p-Chloroamphetamine**  
and hypothalamic hormone  
release, 310
- p-Chlorophenylalanine**  
and hypothalamic hormone  
release, 310
- m-Chlorophenylpiperazine**  
and receptor adaptations, 374
- Chlorothiazide**  
renal aspects of, 271, 277
- Chlorpromazine**  
and drug metabolism, 54  
and excitatory amino acids,  
177, 179  
and hypothalamic hormone  
release, 309  
and receptor adaptations,  
374, 377
- Cholecystographic agents**  
biliary excretion of, 56
- Cholera toxin**  
and adenylate cyclase  
mutations, 252-58,  
260-61  
and histamine secretion, 75
- Cholesterol**  
and barbiturate action, 86  
early studies of, 3
- Cholestyramine**  
and P-450 induction, 437-38,  
440
- Cholestokinin**  
as neuropeptide, 606  
and presynaptic receptors, 21
- Choline acetyltransferase**  
(CAT)

- and barbiturate tolerance and dependence, 98-99
- and memory studies, 329-30
- and nerve growth factor studies, 213-14
- Cholinergic drugs and memory disorders, 328-31, 346-47
- Cholinergic neurons and presynaptic receptors, 8-9
- Cholinergic receptors and histamine secretion, 76
- Cholinesterase and memory studies, 326-27, 330
- p*-Chlorophenylalanine and receptor adaptations, 374
- Chorionic gonadotropin (hCG) and LHRH studies, 299, 301-2
- Chromaffin cells
  - adrenal and nerve growth factor effects, 212-13, 217, 223
- Chromatographic assays of disulfiram, 589
- Chromosomal damage and carcinogen testing, 399, 402, 405
- Cinobufagin early studies of, 3
- Cinobufotoxin early studies of, 3
- Cleft palate and teratology screening, 423
- Clinclamycin absorption of, 36
- Clonidine
  - and hypothalamic hormone release, 313-14
  - and memory studies, 345
  - and presynaptic receptors, 609
  - and receptor adaptations, 358, 360, 365
- Clozapine renal aspects of, 277
- Clorimipramine and receptor adaptations, 373
- Clozapine and effects on GABA receptors, 377
- CNS (Central nervous system) and acute lymphocytic leukemia, 233-34, 238, 244-45
  - barbiturate action on, 91
  - delayed neurotoxicity effects on, 516
  - drugs acting on and receptor adaptations to, 357-80
  - inhibition and presynaptic receptors, 8
  - nerve growth factor effects, 215, 218-20
  - and vasomotor regulation in migraine, 463-65, 467-68, 473
- Cobra venom factor and nerve growth factor studies, 220
- Cocaine buccal absorption of, 43
  - receptor adaptations to, 361, 370
- Cochlear effects of EA and related diuretics, 281-85
- Codeine lack of buccal absorption, 43
- Colchicine and nerve growth factor studies, 214, 221-22
- Colonic absorption and structure-activity relationships, 41-43
- Colorimetric assays of disulfiram, 589
- Compound 48/80 and hypersensitivity control, 71, 76
- Concanavalin A and hypersensitivity studies, 71-72
- Copper and disulfiram action, 575, 581, 589
- Corticosteroids skin absorption of, 49
  - in treating acute lymphocytic leukemia, 232
- Corticotropin releasing factor and neurotransmitter regulation, 306-7, 314
- Coumarin 7-hydroxylase and P-450 induction, 447
- Coumarins interaction with disulfiram, 587
- Creatine phosphokinase in labeling studies, 117, 124
- cyclic Adenosine
  - 3',5'-monophosphate (cyclic AMP, cAMP) and adenylate cyclase studies, 251-56, 258-61
  - and excitatory amino acids, 183
  - and histamine secretion, 75-77
  - and hypothalamic control of pituitary, 297
- in migraine, 464, 467, 469, 473
- and prostaglandin action, 481, 495, 501
- radioimmunoassays of, 114, 116, 120, 122
- and receptor adaptations, 364-65, 380
- cyclic Endoperoxides and prostaglandin synthesis, 483, 498
- cyclic Guanosine
  - 3',5'-monophosphate (cyclic GMP, cGMP) and excitatory amino acids, 183-84
  - and histamine secretion, 76
  - and prostaglandin synthesis, 501
- radioimmunoassays of, 114, 116, 120, 122
- Cyclic nucleotides and hypersensitivity studies, 75-77
- Cyclic nucleotide synthesis effects of excitants on, 183-84
- Cycloheximide and barbiturate tolerance, 102
- Cyclooxygenase and arachidonic acid metabolism, 481, 483-84, 497
- and hypersensitivity studies, 74
- renal aspects of, 271
- Cyclophosphamide in treating acute lymphocytic leukemia, 232-33, 238-39, 242
- Cyclosporin a in treating graft versus host disease, 242
- Cyproheptidine and hypothalamic hormone release, 315
- in migraine treatment, 464, 467, 470-71
- L-Cysteine and amino acid transmitters, 166, 168-69, 175
- L-Cysteine sulfinate and amino acid transmitters, 166, 168
- Cytochrome P-450 and disulfiram metabolism, 577, 587
- see P-450
- Cytosine arabinoside combined with daunorubicin, 599
- in treating acute lymphocytic

# 650 SUBJECT INDEX

- leukemia, 232-33, 238-39, 241
- D
  - Dauorubicin (Cerubidine)
    - in treating acute lymphocytic leukemia, 232-33, 238
    - in treating acute nonlymphocytic leukemia, 598-99
  - p,p'-DDT
    - and P-450 induction, 440, 449
  - 3-Deaza-adenosine
    - and calcium uptake inhibition, 72
  - Decision point battery, table of results, 403
  - DEF (S,S,S-Tri-*n*-butyl phosphorotriphosphate)
    - and delayed neurotoxicity, 513-14
  - Dehydrogenases
    - and disulfiram actions, 580
  - Demer (Metyrosine)
    - in pheochromocytoma treatment, 597-98
  - Deoxycoformycin
    - in treating childhood ALL, 239
  - 2-Deoxy- $\alpha$ -glucose
    - and histamine secretion, 72
  - Depression
    - presynaptic receptor involvement, 609
  - 1-Desamino- $\delta$ -*D*-arginine
    - vasopressin
      - and memory studies, 337
  - Desglycinamide-lysine- $\delta$ -vasopressin (DGLVP)
    - and memory studies, 336
  - Desipramine (DMI)
    - effects on receptor binding, 359-65, 373
  - Desoxycorticosterone acetate (DOCA)
    - bucoal absorption of, 43
    - and prostaglandin action, 499
  - Dexamethasone
    - and P-450 induction, 450
  - Dextetidine
    - and receptor adaptations, 376
  - Diabetes insipidus
    - and vasopressin and memory studies, 336
  - Diacylglycerol
    - and histamine secretion, 72-73
  - Diacylglycerol
    - inositolphosphate
      - and histamine secretion, 77
  - Di(2-Aminoethoxy)-ethane
    - tetracetic acid (EGTA)
      - and histamine secretion, 67, 69
  - Diazepam
    - and amino acid actions, 177
    - and receptor adaptations, 376, 378
  - Dibenzo-*p*-dioxins
    - and P-450 induction, 449-50
  - Dibutyl cyclic AMP
    - and hypersensitivity studies, 71, 75-76
  - Dicarboxylic acids
    - and excitatory amino acids, 184
  - 6,7-Dichloro-2,3-dihydro-5-(2-thienylcarbonyl)benzofuran-2-carboxylic acid
    - diuretic-saluretic properties of, 280
  - Dichlorvos
    - and delayed neurotoxicity, 513-14
  - $\gamma$ -Dichroine
    - from Chinese herbs, 4
  - Diethyldithiocarbamate (DDC)
    - and memory studies, 340
  - Diethyldithiocarbamate acid (DDC)
    - and disulfiram action, 576-81, 589
  - Diethyl nitrosamine
    - and lung cancer studies, 156
  - Diethylstilbestrol
    - and peroxidase induction, 431, 447-48, 454
  - Digitalis
    - radioimmunoassays of, 114
    - recent review of, 612
  - Digitoxin
    - transport mechanisms for, 33
  - Digoxin
    - transport mechanisms for, 33
  - Dihydroalprenolol (DHA)
    - and receptor adaptations, 361, 365-66
  - Dihydroergocryptine
    - and receptor adaptations, 359
  - Dihydroergotamine
    - in migraine treatment, 464
  - Dihydrothacrynic acid
    - structure-activity relationships, 266-67, 282
  - Dihydrokainate
    - and amino acid transmitters, 169, 185
  - L-3,4-Dihydrophenylalanine
    - transport mechanisms for, 33
  - Dihydroprotocrotinin
    - and GABA antagonism, 90
  - Diisopropylfluorophosphate (DFF)
    - and memory studies, 326-27
    - and receptor adaptations, 375
  - Diisopropyl phosphorofluoridate (DFF)
    - and delayed neurotoxicity, 513-15, 517-18, 521
  - Dimethylbenz(a)anthracene (DMBA)
    - as carcinogen, 136-38, 145-46, 148, 152, 403, 408
  - 5-(1,3-Dimethylbutyl)-5-ethyl barbituric acid (DMBB)
    - convulsant effects of, 84
  - Dimethyl sulfoxide
    - and monoclonal antibodies, 126
  - Dinitrochlorobenzene
    - and P-450 induction, 451
  - Dipivefrin HCl (Dipiope)
    - in glaucoma treatment, 599
  - Disulfiram
    - actions and metabolism of, 575-90
    - and body enzymes, 580-81
    - chemistry of, 576
    - determination methods, 588-89
    - drugs with similar actions, 588
    - interaction with other drugs, 586-88
    - pharmacodynamics, 581-86
    - pharmacokinetics of, 576-79
  - Diuretics
    - structure-activity relationships, 265-86
  - Diuretic-saluretic action
    - relationship of POA acid structure to, 266-69, 273-76
  - DNA
    - binding with carcinogens in lung cancer studies, 136, 140, 158
    - damage
      - in carcinogen identification, 393-95, 399, 405
      - repair
        - and carcinogen testing, 401-2
  - Dominant lethal test
    - in carcinogen testing, 393, 405
  - DOPA
    - and presynaptic receptors, 21
  - L-Dopa
    - and hypothalamic hormone release, 308-10, 312-14
    - and memory studies, 328

- and receptor adaptation studies, 369-71
- Dopa decarboxylase**
  - and nerve growth factor studies, 208, 210-12, 221-22
- Dopamine (DA)**
  - and barbiturate interaction, 90, 98, 100
  - and depletion of with metyrosine, 598
  - and disulfiram action, 581, 583-84
  - and excitatory amino acids, 166, 170-71
  - and hypothalamic hormones, 307, 309-14
  - and memory studies, 339-44, 347
  - and nerve growth factor studies, 219
  - as presynaptic receptor, 10-14, 18, 21
- Dopamine- $\beta$ -hydroxylase**
  - and Alzheimer's disease, 329, 340
  - and disulfiram action, 581, 583-84
  - and nerve growth factor studies, 208, 210-13, 215-16, 222
- Dopamine receptors**
  - adaptations to centrally acting drugs, 366-72
  - agonists, 369-7
  - antagonists, 366-69
  - miscellaneous drugs, 371-72
- Doxorubicin**
  - in treating acute lymphocytic leukemia, 232, 239
- Drug abuse**
  - recent reviews, 610-11
- Drug metabolizing enzymes**
  - and genetics of P-450 induction, 432-54
- E**
- EGTA**
  - and histamine secretion, 67, 69
- Eicosapentaenoic acid**
  - and prostaglandin synthesis, 484
- 5,8,11,14-Eicosatetraynoic acid**
  - and histamine secretion, 74
- Electroconvulsive shocks**
  - and receptor adaptations, 363
- Electrogenic pump**
  - and amino acid transmitters, 182
- Ellipticine**
  - and P-450 induction, 439-40, 444
- Endogenous compounds**
  - and presynaptic receptors, 8
- Endoperoxides**
  - cyclic
    - and prostaglandin synthesis, 483, 498
- beta-Endorphin**
  - and hypothalamic hormone release, 310
  - recent studies, 607-8
- Endorphins**
  - and memory studies, 333, 337-38
  - as presynaptic inhibitors, 18
- Enkephalin**
  - as presynaptic receptor, 12, 21
- Enkephalins**
  - and endorphins
    - recent reviews, 606-8
    - and memory studies, 333, 337-38
- Ephedrine**
  - early studies of, 2
- Epigenetic chemicals**
  - and carcinogen testing, 397, 399
- Epinephrine (Adrenaline)**
  - early studies of, 3-4
  - and histamine secretion, 75
  - and hypothalamic hormone release, 310
  - and memory studies, 342, 344
  - in migraine attack, 469
- EPN (O-Ethyl O-4-nitrophenyl phenylphosphomothioate)**
  - and delayed neurotoxicity, 513-15, 533
- Epoxide hydrolases**
  - and P-450 induction, 433, 435, 444
- Epstein-Barr virus**
  - and acute childhood ALL, 235
- Ergot alkaloids**
  - lack of buccal absorption, 43
- Ergotamine**
  - in migraine treatment, 464-66, 470
- Ergots**
  - and hypothalamic hormone release, 309, 313
  - and receptor adaptation studies, 369
- Erythrityl tetranitrate**
  - buccal absorption of, 44
- Estradiol**
  - effects on dopamine receptors, 372
  - and LHRH studies, 300
- Estrogen**
  - effects on dopamine receptors, 372
  - and LHRH studies, 299-300, 302, 311-12
  - and P-450 induction, 444, 447-49
- Estrogens**
  - buccal absorption of, 43
- Ethacrynic acid (EA)**
  - and related diuretics, 265-86
  - acute renin release, 276-77
  - antihypertensive activity, 284
  - diuretic-saluretic activity, 273-76
  - EA compared with
    - EA-cysteine, 284-85
    - ototoxicity, 281-84
    - plasma protein binding and biotransformation, 269-70
    - renal hemodynamic effects, 271-72
  - SAR overview, 266-69
  - summary, 285-86
  - uricosuric activity, 277-80
- Ethacrynic acid-cysteine**
  - structure-activity relationships of, 270, 282-85
- Ethacrynic acid-glutathione**
  - structure-activity relationships, 270, 282, 285
- Ethacrynic acid**
  - acid-mercaptoethylamine structure-activity relationships of, 270, 282
- Ethanol**
  - and disulfiram action, 575-76, 580-86, 589
  - and glutamate binding studies, 179
  - receptor adaptations to, 365, 371, 376-79
- Ethoxyresorufin**
  - and P-450 induction, 451
- Ethylene bromide**
  - interaction with disulfiram, 587
- Eucalyptus tree pollen**
  - and P-450 induction, 451
- Excretion of drugs**
  - and physicochemical properties, 54-56
- F**
- Fenamates**
  - and migraine studies, 473
- o-Fenfluramine**

- and receptor adaptations, 374
- FLA-63  
and barbiturate dependence, 99
- Flavoprotein reductases  
and P-450 induction, 433-34
- Flunitrazepam binding  
and receptor adaptations, 378-79
- N-2-Fluorenylacetic acid  
and carcinogen testing, 408, 411
- 1-Fluorenylamine  
as carcinogen, 398
- 2-Fluorenylamine  
and carcinogen testing, 411
- Fluorescent immunoassays  
and radioimmunoassay studies, 119
- Fluoride ions  
and adenylate cyclase mutations, 252, 254, 256
- 5-Fluorouracil  
transport mechanisms for, 33  
in treating childhood ALL, 239, 241
- Fluoxetine  
and receptor adaptations, 373
- Fluphenazine  
and receptor adaptation studies, 366
- Follicle-stimulating hormone (FSH)  
in immunoassay studies, 124  
and neurotransmitter regulation, 297, 299-301, 311-12
- Formaldehyde  
in lung cancer studies, 156
- FPL 57712  
as SRS antagonist, 74
- Fructose-1,6-diphosphate dehydrogenase  
inhibition by disulfiram, 580
- Furfural  
in lung cancer studies, 156
- Furosemide  
renal aspects of, 272, 277, 283
- G
- GABA ( $\gamma$ -Aminobutyric acid)  
and barbiturate interaction, 88, 90-91, 98, 100-3  
and excitatory amino acids, 167, 176-77, 186  
and hypothalamic hormone release, 307  
and presynaptic receptors, 8-12, 14, 16-19, 22
- GABA receptors  
adaptations to centrally acting drugs, 377-78
- GABA-transaminase (GABA-T)  
and barbiturate tolerance and dependence, 98, 100
- Galactorrhea-amenorrhea syndrome  
and hypothalamic hormone release, 312
- Gastric absorption  
and structure-activity relationships, 34-35
- Gastrin  
as neuropeptide, 606
- Genetics of P-450 induction, 431-54
- Ah complex, 440-46
- Ah receptor, 442-43  
evidence for temporal genes, 446  
pleiotypic response, 440-42
- endogenous P-450, 435-38  
induced forms of P-450, 438-39, 444-45  
multiple inducers of P-450, 439-40  
other genetically regulated enzymes, 447
- phase 1 and phase 2 drug metabolizing enzymes, 432
- polysubstrate monooxygenases, 433-35
- potential significance of Ah complex, 448-54
- Genotoxic chemicals  
and carcinogen testing, 397, 399, 404-5, 408, 410
- Ginger-Jake paralysis  
and TOCP poisoning, 512
- Glaucoma  
marijuana use in treatment, 611  
new treatment for, 599
- Glucagon  
and prostaglandin action, 481  
resistance to  
in pseudohypoparathyroidism, 259
- Glucocorticoid receptor  
and P-450 induction, 450
- Glucocorticoids  
and adenylate cyclase studies, 252  
and nerve growth factor studies, 213  
and prostaglandin synthesis, 483
- Glucose-6-phosphatase  
and carcinogen testing, 407  
and stereology applications, 560, 562, 564-66
- $\beta$ -Glucuronidase  
and testosterone induction, 448
- Glucuronidation  
of disulfiram, 577, 579
- Glutamate  
barbiturates inhibition of release, 88  
as presynaptic receptor, 11-14
- D-Glutamate  
and amino acid transmitters, 168, 178
- L-Glutamate  
and excitatory amino acid transmitters, 166-69, 171, 174-75, 177-81, 183, 186-88
- Glutamate decarboxylase  
and barbiturate tolerance and dependence, 98
- Glutamate dehydrogenase (GDH)  
and excitatory amino acids, 167
- Glutamic acid decarboxylase  
and Alzheimer's disease, 329  
and barbiturate dependence, 100-1
- L-Glutamic acid diethyl ester (GDEE)  
and amino acid transmitters, 172, 174-76, 178, 184-85, 189-90
- Glutamine  
and excitatory amino acid transmitters, 167  
in treating childhood ALL, 241
- $\gamma$ -D-Glutamylglycine (DGG)  
and amino acid transmitters, 172-74, 184-85, 188, 190-91
- $\gamma$ -Glutamyl transpeptidase  
and carcinogen testing, 407-8
- Glyceraldehyde-3-phosphate dehydrogenase  
inhibition by disulfiram, 580-81
- Glycine  
as presynaptic receptor, 10
- Glycosides  
cardiac  
lack of buccal absorption, 43  
early studies of, 4  
transport mechanisms for, 33
- Gonadotropin regulation  
and male contraceptives, 610
- Gonadotropins  
and hypothalamic control of pituitary, 299, 301-2, 310-13  
resistance to  
in pseudohypoparathyroidism, 259

- Gonads  
effects of LHRH on, 301-3
- Graft versus host disease  
and bone marrow transplantation  
in treating childhood ALL, 241-43
- Growth hormone (GH)  
and hypothalamic control of pituitary, 302-4, 306, 313  
radioimmunoassays of, 114  
stimulation by  $\beta$ -endorphin, 607
- Growth hormone-releasing factor (GHRF)  
and neurotransmitter regulation, 303, 306
- Growth and maturation chemotherapy effects on, 234
- Guanethidine  
and nerve growth factor studies, 214
- Guanine nucleotides  
and cAMP synthesis, 251-52, 254-57  
and receptor adaptation studies, 368, 380
- Guanosine-5'-0-(3-thio triphosphate)(GTP)  
and adenylate cyclase mutations, 252-53, 259
- Guanylate cyclase  
and prostaglandin synthesis, 501
- Guanyl cyclase  
and excitatory amino acids, 183
- H
- Haloperidol  
and hypothalamic hormone release, 309, 313  
receptor adaptations to, 360, 366, 368-70, 372, 374, 376-78
- HCG  
in immunoassay studies, 124
- Hemoliderosis  
treatment using desferrioxamine, 34
- Hepatotoxicity  
disulfiram induced, 583-84
- Hexobarbital  
interaction with disulfiram, 587  
and P-450 induction, 440, 444  
tolerance and dependence studies, 93
- Hexokinase  
and disulfiram inhibition, 581
- Histamine  
as hypersensitivity mediator, 63-77  
and hypothalamic hormone release, 307  
as presynaptic receptor, 10
- Histocompatibility genes  
and treatment of childhood ALL, 237, 241
- D-Homocysteate  
and amino acid transmitters, 181
- L-Homocysteate  
and amino acid transmitters, 166, 168-69, 181
- L-Homocysteine sulfinate  
and amino acid transmitters, 166
- L-Homocysteine-thiolactone  
and hypersensitivity studies, 73
- Honey bee venom  
and P-450 induction, 451
- Hormone regulation  
serotonergic raphe cells role in, 470, 474
- Hormones  
and carcinogen testing, 404-5, 410  
hypothalamic  
see Hypothalamic hormones
- Hydrochlorothiazide  
antihypertensive effects of, 284
- 6-HydroxyDOPA  
and amino acid binding studies, 179
- 6-Hydroxydopamine (6-OHDA)  
and barbiturate dependence, 99-101  
and memory studies, 339-41, 343  
and nerve growth factor studies, 212, 214, 219, 221-22  
and presynaptic receptors, 14  
and receptor adaptations, 358, 362, 371
- 5-Hydroxyindoleacetic acid (5-HIAA)  
in migraine action, 468, 470
- 3-(p-Hydroxyphenyl) propionic acid-N-hydroxysuccinimide (HPPS)  
in labeling studies, 117-18
- 9-Hydroxyprostaglandin dehydrogenase  
and prostaglandin synthesis, 488, 496-97
- 15-Hydroxyprostaglandin dehydrogenase  
renal aspects of, 272
- 5-Hydroxytryptamine (Serotonin)  
and excitatory amino acids, 166, 170  
as hypersensitivity mediator, 63  
see also Serotonin
- 5-Hydroxytryptophan  
and hypothalamic hormone release, 308, 310, 314-15  
and receptor adaptations, 374
- L-5-Hydroxytryptophan  
transport mechanisms for, 33
- 6-Hydroxyuracil  
and barbiturate ENS action, 91
- Hypersensitivity  
immediate, 63-77  
calcium, 67-71  
cellular receptor for IgE, 64-65  
cyclic nucleotides, 75-77  
membrane signal, 65-67  
phospholipids, 71-75
- Hypertension  
new medication for, 602-4  
presynaptic receptors in, 609  
and prostaglandins, 482, 501
- Hypothalamic hormones  
and neurotransmitter regulation, 295-315  
adrenocorticotropin, 314-15  
gonadotropins, 310-13  
growth hormone, 313  
luteinizing hormone-releasing hormone, 296-302  
neurotransmitter effects on hormone release, 307-8  
prolactin, 308-10  
somatostatin, 302-7  
thyrotropin, 313-14  
thyrotropin releasing hormone, 304-7
- Hypothermia  
as barbiturate tolerance indicator, 94-95
- Hypoxanthine-guanine phosphoribosyl transferase  
in carcinogen screening, 400  
and radioimmunoassay studies, 127
- I
- Ibotenate  
and amino acid transmitters, 176-77
- Idoxuridine  
in keratitis treatment, 600
- IgE  
and hypersensitivity control, 63-64, 66, 68, 70-71  
cellular receptor for, 64-65



## 654 SUBJECT INDEX

- Imidazol-4-acetic acid
  - and receptor adaptations, 377-78
- Imidazoline
  - and presynaptic receptors, 22
- Imipramine
  - effects on receptor binding, 359, 364, 368-373
- Immune suppression
  - effects on respiratory tract tumors, 136-38
- Immunocytochemical techniques
  - and LHR perikarya, 297
- Immunogen
  - nerve growth factor as, 206-7
- Immunoglobulin
  - and treatment of childhood ALL, 237, 240, 243
- Immunoglobulin E
  - see IgE
- Immunological reactions
  - see Hypersensitivity
- Immunosuppression
  - and monooxygenase inducers, 450-52
- Immunosympathectomy
  - and nerve growth factor studies, 210-11, 213, 218-20
- Indacrinone (MK-196)
  - structure-activity relationships, 268-70, 272, 274-77, 280, 283-85
- Indapamide
  - renal aspects of, 277
- Indoleamine
  - and nerve growth factor studies, 219
- Indoles
  - and P-450 induction, 435, 438
- Indomethacin
  - and hypersensitivity studies, 74
  - and migraine studies, 473
  - and prostaglandin action, 483, 494, 497, 500
  - renal aspects of, 271
- Inositol
  - in hypersensitivity studies, 71
- Insulin
  - radioimmunoassays of, 114
- Intestinal absorption
  - and structure-activity relationships, 36-41
- Iodine
  - radioactive isotopes of
    - in radioimmunoassay, 115-19
- <sup>127</sup>I-Iodothyroxybenzylpindolol
  - and receptor adaptation studies, 362
- Iodoxamic acid
  - biliary excretion of, 56
- Ionomycin
  - and histamine secretion, 67
- Ionophore A23187
  - in hypersensitivity studies, 67, 69-71, 73, 75-76
- Iopanoic acid
  - biliary excretion of, 56
- Iprindole
  - and receptor adaptations, 360, 365, 373
- Iron ions
  - and amino acid binding studies, 179
- S-Isobutyl-3-deaza-adenosine
  - and histamine secretion, 72-73
- Isoniazid
  - and P-450 induction, 439-40
- Isoprenaline
  - and histamine secretion, 75
  - in presynaptic receptor studies, 14
- Isoproterenol
  - and adenylate cyclase mutations, 252-54, 256
  - compared with ritodrine, 601
  - receptor adaptations to, 361-62, 365-66
  - renal aspects of, 277
- l-Isoproterenol
  - and memory studies, 340
- Isoxanole
  - and P-450 induction, 437-38, 440, 452
- K
- Kainate
  - and amino acid transmitters, 168, 172-75, 177-78, 180-81, 183, 185-86, 189
- Kallikrein
  - and prostaglandins, 488, 498-99
- Kallikrein-kinin system
  - and prostaglandin action, 482, 492, 499, 503
- Karnofsky's law
  - and teratology screening, 421, 427
- Keratoconjunctivitis
  - treatment of, 600-1
- Ketoprofen
  - and migraine studies, 473
- 6-Keto-prostaglandin
  - and prostaglandin synthesis, 488-91, 495-97, 503
  - renal aspects of, 272, 275
- Kinases
  - and prostaglandin synthesis, 500-1
- Kinins
  - and hypersensitivity, 63
  - and prostaglandin action, 482, 488, 496, 498-99, 502
- Korotkoff's disease
  - and vasopressin in memory studies, 337, 345
- L
- Lactate
  - alterations during migraine attack, 464
- Lactation
  - and hypothalamic hormone release, 310
- Lactoperoxidase
  - in labeling studies, 117
- Lanthanum
  - and histamine secretion, 67-69
- Learning disabilities
  - as chemotherapy effect, 234
- Lecithin
  - and memory studies, 329
- Leptophos
  - and delayed neurotoxicity, 512-15, 520
- Leucine-enkephalin
  - and memory studies, 337
- Leukotrienes
  - and arachidonic acid metabolism, 479-80
  - and histamine secretion, 74, 77
- Lincomycin
  - absorption of, 36
- Lipid-barbiturate interactions, 85-86, 101-2
- Lipid barrier
  - and drug disposition, 33-44
- Lipid solubility
  - and POA acid structure, 469
- $\beta$ -Lipotropin
  - and opioid peptide system, 607
- Lithium
  - receptor adaptations to, 360, 364, 368, 374, 378
- Loniten
  - see Minoxidil
- LSD
  - effects on receptors, 373-74
- Lung cancer
  - pathogenesis of, 133-58
  - age-specific susceptibility, 134-36
  - benzo(e)pyrene as cocarcinogen, 153-55

- chrysotile asbestos effects, 146-48
- immune suppression effects on tumors, 136-38
- irritant gases and vapors, 155-57
- nickel subsulfide as cocarcinogen, 151-53
- role of inert particles, 148-51
- role of respiratory infections, 140-43
- role of Vitamin A, 138-40
- summary, 157-58
- two-stage carcinogenesis, 143-46
- Lung tumors**
- induction in mice and carcinogen testing, 406, 409
- Luteinizing hormone (LH) and hypothalamic control of pituitary, 299-302, 310-12**
- in immunoassay studies, 124
- and P-450 induction, 438
- and prostaglandin synthesis, 482
- Luteinizing hormone-releasing hormone (LHRH) and neurotransmitter regulation, 296-303, 305, 311**
- Lymphocytes**
- classification of and acute lymphocytic leukemia, 235-38
- Lysine-8-vasopressin (LVP) and memory studies, 336**
- M**
- Magnesium ions**
- and adenylate cyclase mutations, 254-55
- and amino acid transmitters, 180, 184
- in barbiturate tolerance and dependence, 102
- and immunoassay studies, 122
- Male contraceptives**
- recent reviews of, 610
- Manganese ions**
- and amino acid transmitters, 178
- Manic-depressive psychosis**
- treatment of and receptor adaptations, 374
- Manitol hexanitrate**
- buccal absorption of, 44
- Marijuana**
- recent studies, 610-11
- Mast cells**
- in hypersensitivity control, 63-64, 68-72, 74-75
- Meclofenamic acid**
- and hypersensitivity studies, 74
- Melanocyte-stimulating hormone**
- as neuropeptide, 606
- Melatonin**
- and hypothalamic hormone release, 312
- Membrane conductance and excitatory amino acid transmitters, 181-83**
- Membrane lipids**
- in barbiturate tolerance and dependence, 101-3
- Membranes and drug permeation, 32-34**
- Memory**
- neurobiology of, 323-48
- acetylcholine, 326-31
- ACTH, 333-36
- catecholamines, 339-45
- memory disorders and cholinergic drugs, 328-31
- opioid peptides, 337-39
- peptides, 333-39
- protein synthesis, 331-33
- vasopressin, 336-37
- Meperidine**
- interaction with disulfiram, 587
- 6-Mercaptopurine and disulfiram metabolism, 579**
- in treating acute lymphocytic leukemia, 232-33, 238-39
- Merphos**
- and delayed neurotoxicity, 513-14
- Methacholine**
- lack of buccal absorption, 43
- Methantheline**
- absorption of, 38
- Methergoline**
- and receptor adaptations, 374
- Methionine-enkephalin (met-Enkephalin) and hypothalamic hormone release, 310**
- and memory studies, 337-38
- Methotrexate**
- in acute lymphocytic leukemia, 233, 238-39, 241-42, 244
- transport mechanisms for, 33
- 3-Methoxy-4-hydroxyphenyl glycol (MHPG) and memory studies, 345**
- N-Methyl-D-aspartate (NMDA) and amino acid transmitters, 168, 172-88**
- N-Methyl-aspartic acid and amino acid transmitters, 170**
- 3-Methylcholanthrene (MCA) as carcinogen, 138-39**
- and P-450 induction, 436-40, 443-44, 453-54
- $\alpha$ -Methyl-Dopa and hypothalamic hormone release, 309, 313**
- as metyrosine metabolite, 598
- and presynaptic receptors, 609
- 6-Methylmercaptapurine and disulfiram metabolism, 579**
- 3-Methyl-2-naphthylamine as carcinogen, 406**
- N-Methyl-N'-nitro-N-nitrosoguanidine (MNNG) as carcinogen, 145**
- Methylnitrosourea and carcinogen testing, 408**
- $\alpha$ -Methylnorepinephrine as metyrosine metabolite, 598**
- $\alpha$ -Methylparatyrosine and hypothalamic hormone release, 309**
- Methylphenidate and memory studies, 344**
- N-Methyl-5-propyl-5-phenylbarbiturate**
- convulsant effects of, 84
- N-Methylquinolinium transfer mechanisms for, 38**
- Methyltestosterone**
- buccal absorption of, 44
- Methyltransferase and hypersensitivity studies, 72-73**
- $\alpha$ -Methyl tyrosine and barbiturate dependence, 99**
- $\alpha$ -Methyl-L-tyrosine (AMT) see Metyrosine**
- Methylxanthine and presynaptic receptors, 22**
- Methysergide (1-Methyl- $\alpha$ -lysergic acid butanolamide) and hypothalamic hormone release, 310**
- in migraine treatment, 464, 467, 469-71
- and receptor adaptations, 374
- Metolazone**
- renal aspects of, 277

- Metyrosine (DEMSEK)**  
 in pheochromocytoma treatment, 596-98
- Mianerine**  
 and receptor adaptations, 362-63
- Migraine**  
 pharmacology of, 463-74  
 brain serotonin, 467-69  
 effects of drugs on cranial vasculature, 470-72  
 ergotamine, 465-66  
 pathophysiology of migraine, 469-70  
 prostaglandins, 473  
 putative drug mechanisms, 466-72
- Milk**  
 LHRH levels in, 301
- Mineralocorticoids**  
 and renal aspects of prostaglandin, 499
- Minoxidil (Loniten)**  
 in hypertension treatment, 602-4
- Mipfofox**  
 and delayed neurotoxicity, 512-13, 515
- MK-196 (Indacrinone)**  
 structure-activity relationships, 268-70, 272, 274-77, 280, 283-85
- MK-473 (2-Cyclopentyl-6,7-dichloro-2-methyl-1-oxo-5-indanyloxyacetic acid)**  
 renal aspects of, 280
- Monoamine oxidase (MAO)**  
 alterations during migraine attacks, 464, 470  
 and Alzheimer's disease, 329  
 and disulfiram action, 580  
 and presynaptic receptors, 8
- Monoamine oxidase inhibitors**  
 and hypothalamic hormone release, 309  
 in migraine treatment, 464, 467, 472  
 and receptor adaptations, 362, 373
- Monoclonal antibodies**  
 and radioimmunoassay, 126-30
- N-Monomethyl phosphatidyl ethanolamine**  
 in hypersensitivity studies, 72
- Morphine**  
 and drug metabolism, 54  
 and excitatory amino acid release, 171  
 and hypothalamic hormone release, 310, 312  
 interaction with disulfiram, 587
- lack of buccal absorption, 43  
 and memory studies, 338  
 radioimmunoassays of, 114  
 and receptor adaptations to, 366, 372, 377, 379
- Murine leukemia**  
 treatment of, 240
- Muscarine**  
 as presynaptic receptor, 10-11, 14, 20
- Muscarinic acetylcholine receptors**  
 adaptations to centrally acting drugs, 375-77  
 anticholinesterases, 375  
 barbiturates and ethanol, 376-77
- Muscarinic agonists**  
 and presynaptic receptor action, 13, 15-16
- Muscarinic binding**  
 and memory studies, 329-30
- Muscarinic receptor**  
 and barbitol tolerance, 97
- Muscimol**  
 and amino acid actions, 177  
 barbiturate enhancement of, 90
- Mutagens**  
 and P-450 induction, 435  
 see also Carcinogen testing
- Mycotoxins**  
 and excitatory amino acids, 171
- N**
- NAD**  
 in adenylate cyclase mutation studies, 253, 257, 260-61
- NADPH**  
 and disulfiram action, 577, 587
- NADPH cytochrome c reductase**  
 and stereology applications, 559, 561-62, 564-65
- Naloxone**  
 and hypothalamic hormone release, 310, 312-13  
 and memory studies, 338  
 and receptor adaptations, 380
- $\beta$ -Naphthylamine**  
 as carcinogen, 398
- Naproxen**  
 and migraine studies, 473
- $\beta$ -Neoeendorphin**  
 recent studies, 608
- Nerve growth factor**  
 and its antibodies, 205-3  
 adrenal chromaffin cells, 212-13
- adrenergic neurons, 211-12  
 biological effects on target cells, 207-19  
 central nervous system, 218-19  
 mechanism of action, 219-22  
 parasympathetic neurons, 215  
 preganglionic sympathetic neurons, 213-14  
 production and characterization of antibodies, 206-7  
 sensory neurons, 215-17
- Neurobiology**  
 pharmacology of memory, 323-48
- Neurohormones**  
 in memory modulation, 325
- Neuroleptics**  
 and receptor adaptation studies, 367-68, 370, 377
- Neuropeptides**  
 in the brain  
 review of, 605-6
- Neurotensin**  
 and hypothalamic hormone release, 307
- Neurotoxic esterase**  
 and organophosphorus neurotoxicity, 519-20
- Neurotoxicity**  
 delayed organophosphorus, 511-41  
 age sensitivity, 513-14  
 history, 512  
 mechanisms, 515-21  
 site of neurotoxic action, 521-40
- Neurotransmitter regulation**  
 and hormones  
 see Hypothalamic hormones
- Neurotransmitter release**  
 and presynaptic receptor mechanisms, 15
- Neurotransmitters**  
 barbiturate effects on, 87-91, 97-101
- Nickel subsulfide**  
 in occupational lung cancer, 151-53
- Nicotine**  
 buccal absorption of, 43  
 as presynaptic receptor, 10-11
- Nicotinic acid**  
 skin absorption of, 49
- Nioxetine**  
 and receptor adaptations, 362, 373

- Nitrates  
buccal absorption of, 43
- Nitrofurantoin  
diffusion into prostatic fluid, 51
- Nitrogen dioxide  
in lung cancer studies, 156
- Nitrogen mustard  
as carcinogen, 406
- Nitrosamines  
and carcinogen testing, 403, 409-11  
and P-450 induction, 435
- N-Nitrosoheptamethyleneimine  
as carcinogen, 141
- Nitrosoureas  
as carcinogens, 407  
in treatment of childhood ALL, 239
- Nonacetylated isoniazid  
and teratology screening, 420-21, 425
- Nonelectrolytes  
epidermal penetration of, 48
- Noradrenaline  
(Norepinephrine)  
and excitatory amino acids, 166  
and presynaptic receptors, 8-10, 13-20, 22
- Noradrenergic neurons  
and presynaptic receptors, 9
- Norepinephrine (NE)  
alterations during migraine attacks, 464, 471-72  
barbiturates effects on, 88-90, 98-101, 103  
depletion of with metyrosine, 598  
and disulfiram actions, 581, 583-84, 588  
and excitatory amino acids, 167, 170, 173, 176  
and hypothalamic hormone release, 307, 310-14  
and memory studies, 339-45  
and nerve growth factor effects, 208, 219  
and prostaglandin action, 502  
and receptor adaptations, 358-59, 361-66  
in toad venom, 4
- N protein deficiency  
and adenylate cyclase studies, 252-54, 258-61  
functions of N, 254-55
- Nuciferine  
and excitatory amino acids, 176
- O
- Opiate endorphin receptors  
adaptations to centrally acting drugs, 379-80
- Opiate receptors  
and endorphins and enkephalins, 607-8  
and guanine nucleotides in adenylate cyclase studies, 255
- Opiates  
chronic effects on receptors, 372, 375  
as presynaptic receptors, 10-12, 14-15, 22
- Opioid peptides  
and memory studies, 337-39, 345-47  
reviews of, 606-8
- Organophosphorus esters  
and delayed neurotoxicity, 511-41
- Ornithine decarboxylase  
and nerve growth factor studies, 208
- Ototoxicity  
POA acid structure-activity relationships, 281-84
- Ouabain  
in carcinogen screening, 400
- Oxamiquine (Vansil)  
in treating schistosomiasis, 600
- Oxidases  
and disulfiram actions, 580-81
- Oxotremorine  
as muscarinic agonist, 13
- Oxprenolol  
and migraine studies, 471
- Oxygen  
role in migraine attacks, 468, 470
- Oxytocin  
and memory studies, 333  
as presynaptic receptor, 12
- P
- P-448  
and P-450 induction, 444-45
- P-450 (polysubstrate monooxygenase)  
induction activities, 431-54  
and phenobarbital studies, 565
- Pain suppression  
serotonergic raphe cells role, 470, 474
- Papaverine  
in migraine treatment, 464-65, 467, 470, 472
- Parathyroid hormone  
and adenylate cyclase mutations, 259-60
- Parkinson's disease  
dopaminergic neurons in, 328  
and receptor adaptation studies, 370, 377
- Penetrem A  
and excitatory amino acid release, 171
- Penicillins  
biliary excretion of, 56  
and protein binding, 52
- Pentobarbital  
and calcium interaction, 87  
mechanisms of action, 84-103
- Pentobarbitone  
and amino acid activity, 177
- Pentothal  
tolerance and dependence studies, 93
- Pentylentetrazol  
and barbiturate dependence, 101
- Peptides  
and memory studies, 333-39
- Percutaneous absorption  
and structure-activity relationships, 44-50
- Pergolide  
and receptor adaptation studies, 369
- Perikarya  
and LHRH location, 297-98, 303
- Peroxidase induction  
by diethylstilbestrol and P-450 activities, 431, 447, 454
- Pesticides  
and percutaneous absorption, 44
- PGE-9-ketoreductase  
and prostaglandin synthesis, 500-1
- Phagocytosis  
and drug transport, 34
- Phenelzine  
in migraine treatment, 464, 467, 470, 472
- Phenobarbital  
effects on membranes, 553  
enzyme induction with, 563-65  
and membrane lipid interactions, 85  
and P-450 induction, 463-40, 447-48, 452-54  
protein induction with, 556-59  
and protein synthesis inhibition, 91  
tolerance and dependence studies, 93, 96, 99-102

# 658 SUBJECT INDEX

- Phenols
  - absorption of, 39
  - skin absorption of, 49-50
- Phenothiazines
  - and hypothalamic hormone release, 309
- Phenoxyacetic acid-type diuretics (FOA-acid)
  - structure-activity relationships, 263-86
- Phenoxybenzamine
  - in conjunction with metyrosine, 598
  - and memory studies, 341
  - and receptor adaptations, 364
  - as receptor antagonist, 20-21
- Phentolamine
  - and hypothalamic hormone release, 313
  - in presynaptic receptor studies, 17
- Phenylboronic acids
  - skin absorption of, 45
- Phenyl phenylacetate (PPA)
  - and delayed neurotoxicity, 518-19
- Phenylphosphonothioate esters
  - and delayed neurotoxicity, 515
- Phenytion
  - interaction with disulfiram, 587
  - and P-450 induction, 439-40, 444, 448
- Pheochromocytoma
  - treatment of, 597-98
- Phorbol
  - and lung cancer, studies, 145
- Phosphatidic acid
  - in hypersensitivity studies, 71
- Phosphatidopeptide
  - absorption of, 37
- Phosphatidylcholine
  - and barbiturate-lipid interaction, 85
  - in hypersensitivity studies, 71-73
- Phosphatidylethanolamine
  - and barbiturate-lipid interaction, 85-86
  - in hypersensitivity studies, 71-73
- Phosphatidyl inositol
  - and hypersensitivity studies, 71-73
- Phosphatidyl serine
  - in hypersensitivity studies, 71-73
- Phosphodiesterase
  - and adenylate cyclase mutations, 258, 260-61
  - and histamine secretion, 77
- and immunoassay studies, 122
- in migraine, 467, 470
- Phospholipase
  - and histamine secretion, 73-74
- Phospholipase A<sub>1</sub>
  - and prostaglandin biosynthesis, 482
- Phospholipids
  - and barbiturate action, 86-87, 101-2
  - in hypersensitivity control, 71-75
- 2-amino-4-Phosphonobutyrate (APB)
  - and amino acid transmitters, 173-74, 178, 190-91
- Physostigmine
  - and hypothalamic hormone release, 309-313
  - and memory studies, 326-27, 329-31
  - and receptor adaptations, 375
- Picrotoxin
  - and dopamine release, 18
- Pilocarpine
  - and barbiturate dependence, 97
  - and hypothalamic hormone release, 309, 313
  - and receptor adaptations, 376-77
- Pimozide
  - and memory studies, 341
  - and receptor adaptation studies, 366
- Pinocytosis
  - and drug transport, 34
- cis-2,3-Piperidine dicarboxylate
  - and amino acid transmitters, 173-74, 176, 185, 188, 191
- Piretanide
  - ototoxicity of, 283
- Piribedil
  - and hypothalamic hormone release, 309, 311-14
- Pituitary
  - see Hypothalamic hormones
- Pituitary function
  - and opioid peptides, 607
- Placebo
  - in treating migraine, 464
- Plasma
  - diffusion of drugs into milk, 50-51
- Plasma protein binding
  - relationship of POA acid structure to, 269-70
- Platelet activating factor
  - and hypersensitivity, 63
- Pneumonitis
  - in lung cancer studies, 140-43
- Podophyllotoxin
  - in treatment of childhood ALL, 239
- Polyacrylamide gel electrophoresis (PAGE)
  - and IgE studies, 63
- Polycyclic aromatic hydrocarbons
  - and carcinogen testing, 401, 403, 405-7, 409-10
  - as respiratory carcinogen, 135, 139-40, 147-48, 152-54, 156-57
- Polycyclic hydrocarbons
  - and P-450 induction, 434, 433-40, 444, 446, 450, 452-53
- Polyethylene glycol
  - in immunoassay studies, 121
  - and monoclonal antibodies, 126
- Polysubstrate monooxygenase (P-450)
  - see Genetics of P-450 induction
- Polyvinylpyrrolidone (PVP)
  - and LHRH studies, 298
- Potassium
  - and presynaptic receptor location, 13, 18
- Potassium ions
  - and excitatory amino acid actions, 168-69, 171, 178, 181-83
- Pralidoxime
  - absorption of, 37
- Prednisone
  - in treating acute lymphocytic leukemia, 232, 238
- Pregnenolone
  - and P-450 induction, 435, 437-38, 440
- Presynaptic receptors, 7-22
  - definition, 7-8
  - development, 8-13
  - function, 16-21
    - modulation by blood-borne agents, 16-17
    - modulation by neighboring neurons, 17-18
    - modulation by synaptic feedback mechanisms, 18-21
  - location, 13-15
  - mechanism, 15-16
  - recent review of, 609
  - summary table of, 10-12
- Prindolol
  - and migraine studies, 471

PR8-influenza virus  
and lung cancer studies, 142,  
144

Probenecid  
renal aspects of, 55, 269, 278

Proestrus  
and LHRH studies, 299, 311

Progesterone  
and LHRH studies, 299-302,  
311

Prohormones  
see hypothalamic hormones

Prolactin  
and carcinogen testing, 404  
and neurotransmitter  
regulation, 302, 305-12  
as presynaptic receptor, 11  
release  
and receptor adaptation  
studies, 368  
stimulation by  $\beta$ -endorphin,  
607

Prolactin release-inhibiting  
factor (PIF)  
and neurotransmitter  
regulation, 307

Prolactin releasing factor  
(PRF)  
and neurotransmitter  
regulation, 307, 309-10

*dl*-Propoanol  
and memory studies, 340

Propanotheline  
absorption of, 38

Propiolactone  
as carcinogen, 406

Propranolol  
and hypothalamic hormone  
release, 313  
in migraine treatment, 464,  
468-72  
and receptor adaptations,  
362, 365-66

Prostacyclin  
and prostaglandins, 479-503  
renal aspects of, 272, 275

Prostaglandin-E  
and adenylate cyclase  
mutations, 252, 254

Prostaglandin E<sub>1</sub>  
and receptor adaptations,  
380

Prostaglandins  
gastrointestinal aspects, 492  
during gestation, 492  
and hypersensitivity, 63,  
63-74  
and inflammation, 612  
and LHRH studies, 300  
and migraine studies, 473  
and P-450 induction, 435,  
438

as presynaptic receptors,  
10-12, 18  
and prostacyclin, 479-503  
biosynthesis of, 482-84  
function, 491-92  
identification of, 485-91  
in kidney, 493-500  
vascular synthesis of,  
500-2

radioimmunoassays of, 114,  
125

renal aspects of, 271-72,  
275-77, 283, 286

Prostaglandin synthetase  
renal aspects of, 271

Prostatic fluid  
diffusion of drugs into, 51

Protein binding  
and drug distribution, 52-53

Protein kinase  
and adenylate cyclase  
mutations, 254-55

Protein kinase enzymes  
and histamine secretion,  
75-77

Protein synthesis  
barbiturate inhibition of, 91,  
102  
and memory studies, 331-33,  
345

Pseudocholinesterase  
see Butyrylcholinesterase

Pseudohypoparathyroidism  
and adenylate cyclase  
mutations, 258-61

Psychosis  
disulfiram-induced, 585

Purine analogues  
and mutational assay, 400

Purines  
transport mechanism for, 33

Pyrazinamide  
renal aspects of, 279

2-Pyridine aldoxine methyl  
iodide (2-PAM)  
absorption of, 38

Pyridoxic acid  
in disulfiram neuropathies,  
585

Pyrimidines  
transport mechanisms for, 33

Pyrophosphorus esters  
and delayed neurotoxicity  
tests, 527-28

# Q

Quinuclidinyl benzilate  
and receptor adaptations,  
375-76

Quipazine

and hypothalamic hormone  
release, 310

Quisqualate  
and amino acid transmitters,  
169, 172-75, 178,  
185-86

# R

Radioactive isotopes  
as indicator molecules  
in radioimmunoassay,  
115-19

Radioimmunoassay, 113-30  
immunization and  
immunologic  
recognition, 115  
improving assay specificity,  
124-26  
indicator molecules, 115-19  
kinetic and thermodynamic  
considerations, 119-20  
monoclonal antibodies,  
126-30  
and prostaglandin studies,  
489-91

radioreceptor assay, 124  
recent reviews of, 609  
separation systems, 120-21  
special features, 130  
techniques  
and localization of LHRH,  
297, 303, 310  
validation of immunoassay,  
122-24

Radioligand binding  
and adenylate cyclase studies,  
251  
in presynaptic receptor  
studies, 14

Radioreceptor assay, 124

Receptor adaptations  
to centrally acting drugs,  
357-80  
 $\alpha$ -adrenergic receptors,  
358-60  
 $\beta$ -adrenergic receptors,  
361-66  
benzodiazepine receptors,  
378-79  
dopamine receptors,  
366-72  
GABA receptors, 377-78  
muscarinic acetylcholine  
receptors, 375-77  
opiate endorphin receptors,  
379-80  
serotonin receptors,  
372-75

Receptors  
presynaptic

- see Presynaptic receptors, 7-22
- Renal handling
  - relationship of POA acid structure to, 269-70
- Renal hemodynamic effects
  - relationship of POA acid structure to, 271-72
- Remin
  - and prostaglandins, 488, 494-97
  - release
    - relationship of POA acid structure to, 276-77
- Remin-angiotensin system
  - and prostaglandin action, 482, 493, 503
- Reserpine
  - and hypothalamic hormone release, 309, 313
  - and memory studies, 340, 343
  - in migraine attack, 469
  - and receptor adaptations, 360, 364, 368, 374, 377
- Retinyl acetate
  - in lung cancer studies, 139
- Reward
  - in memory studies
  - and dopamine action, 342-43
- Ritodrine (Yotopar)
  - in premature labor treatment, 601
- RNA
  - and memory studies, 332
  - and nerve growth factor studies, 215
  - synthesis inhibition by barbiturates, 91
- Rubella
  - and teratology screening, 418
- S
- Safrole
  - and carcinogen testing, 403, 409, 411
- Salicylates
  - renal aspects of, 269
- Saligenin cyclic phosphorus esters
  - and delayed neurotoxicity tests, 537-38
- Salolinalol
  - and disulfiram action, 583
- Saxitoxin
  - recent studies, 608
- Schistosomiasis
  - treatment of, 600
- Schizophrenia
  - presynaptic receptor involvement, 609
- and receptor adaptation studies, 366, 370
- Scopolamine (Transiderm)
  - and memory studies, 327-28
  - in motion sickness treatment, 601-2
- Scorpion toxin
  - and excitatory amino acid release, 171
- Secobarbital
  - and membrane action, 86
  - and neurotransmitter inhibition, 89
  - tolerance and dependence studies, 93
- Sendai virus
  - in lung cancer studies, 142, 144
  - and monoclonal antibodies, 126
- Sephadex G-25
  - and LHRH studies, 298
- Serotonin
  - (5-Hydroxytryptamine, 5-HT)
  - and hypothalamic hormone release, 307-10, 312-15
  - as presynaptic receptor, 10-11, 15, 17-18
  - and receptor adaptations, 362
  - role in migraine, 463-74
- Serotonin receptors
  - adaptations to centrally acting drugs, 372-75
  - agonists and antagonists, 373-75
  - antidepressants, 372-73
- Short-term memory
  - altered by marijuana, 610
  - neural mechanisms of, 325
- Skin tumors
  - induction in mice
  - and carcinogen testing, 406, 409
- Sleep regulation
  - serotonergic raphe cells role in, 470, 474
- Slow reacting substance (SRS)
  - as hypersensitivity mediator, 63, 73-74
- Smoking
  - and carcinogen testing, 411-12
- Sodium
  - and prostaglandin action, 494-96, 498-99
  - renal aspects of, 274, 276, 277, 279
- Sodium decylsulfate
  - and absorption studies, 38
- Sodium fluoride
  - and adenylate cyclase mutations, 256-57
- Sodium ions
  - and excitatory amino acid actions, 168, 179, 182
- Sodium-potassium adenosine triphosphatase (Na,K-ATPase)
  - and digitalis action, 612
  - renal aspects of, 275, 281
  - and transmitter release, 16
- Somatostatin
  - and LHRH studies, 302-7
  - as neuropeptide, 606
  - and presynaptic receptors, 21
- Sorrentino F antiserum
  - and location of LHRH, 298
- SP 111
  - and excitatory amino acids, 176
- Sphingomyelin
  - in hypersensitivity studies, 71
- Spiperone
  - and receptor adaptation studies, 367, 369-70, 372-73
- Spirolactones
  - and protein binding, 53
- Staphylococcal protein A
  - in immunoassay studies, 120
- Stereology
  - applications to
    - pharmacology, 549-71
  - cellular heterogeneities, 554-56
  - changes in cellular organelles, 550-52
  - coherency of data interpretations, 559-63
  - enzyme induction with phenobarbital, 563-65
  - information networks, 552-54
  - protein induction with phenobarbital, 556-59
  - sorting cells
    - mathematically, 566-69
- Steroid
  - absorption of, 40
- Steroid hormones
  - and LHRH studies, 299, 302
- Steroids
  - epidermal penetration of, 46-49
  - and P-450 induction, 435, 438-39, 448, 450-51
- Stress
  - serotonergic raphe cells role in, 470, 474
- Strontium ions
  - and histamine secretion, 70
- Structure-activity relationships
  - and drug disposition, 31-56



- biological membranes and drug permeation, 31-32
- blood-brain barrier penetration, 52
- buccal absorption, 43-44
- colonic absorption, 41-43
- diffusion of drugs from plasma into milk, 50-51
- diffusion of drugs into prostatic fluid, 51
- drug metabolism, 53-54
- excretion of drugs, 54-56
- gastric absorption, 34-35
- intestinal absorption, 36-41
- percutaneous absorption, 44-50
- protein binding, 52-53
- transfer mechanisms across membranes, 32-34
- Substance P
  - and amino acid transmitters, 173
  - and hypothalamic hormone release, 307
  - and memory studies, 333
  - and nerve growth factor studies, 215-16
  - as presynaptic receptor, 11-12, 14, 21-22
  - recent review of, 608-9
  - suppression by opioids, 607
- Succinic dehydrogenase inhibition by disulfiram, 580
- Sulfathiazole derivatives
  - biliary excretion of, 55
- Sulfhydryl
  - and diuretic SARs, 267-68, 283, 285
- Sulfinpyrazone
  - renal aspects of, 278
- S-Sulfocystein
  - and amino acid transmitters, 166
- Sulfonamides
  - absorption of, 40, 42
  - diffusion from plasma to milk, 50
  - diffusion into prostatic fluid, 51
  - gastric absorption of, 35
- Sulfotransferases
  - and P-450 induction, 433
- Sulfur
  - as carcinogen, 406
- Sulfur dioxide
  - and lung cancer studies, 156-57
- Sulpiride
  - and hypothalamic hormone release, 309
- Superfusion bioassay
  - in identifying prostaglandins, 487-89
- Sympathetic neurons
  - nerve growth factor effects on, 207-11
- Synaptic transmission
  - barbiturate effects on, 87-91
- Synaptosomes
  - drug effects on, 14
- Syrosingopine
  - in memory studies, 343
- Systems analysis approach
  - to pharmacology, 550
- T
- TAGGIT
  - in labeling studies, 117
- Tardive dyskinesia
  - and receptor adaptations, 366-68, 370
- TCDD
  - and P-450 induction, 436, 438, 440, 442-43, 448-49, 452-454
- Teratogen
  - TCDD as, 449
- Teratogenic hazards
  - screening for, 415-27
- Testosterone
  - and LHRH studies, 302, 312
  - radioimmunoassays of, 116
  - 1,3,4,6-Tetracholor-3a-6a-diphenylglycoluril (Iodo-Gen) in labeling studies, 118
  - 12-O-Tetradecanoylphorbol-13-acetate (TPA)
    - as cancer promoting agent, 144-46
- Tetrahydrocannabinol (THC)
  - recent studies, 610-11
- Tetrahydroisoquinoline
  - and disulfiram action, 583
- Tetrahydrouridine
  - in treating childhood ALL, 241
- Tetrazo dyes
  - as carcinogens, 398
- Tetrodotoxin
  - and excitatory amino acid release, 171
  - and presynaptic receptor location, 13
  - recent studies, 608
- Thalidomide
  - and teratology screening, 418
- Theophylline
  - and hypersensitivity studies, 71, 75
  - and P-450 induction, 444, 448
- Thiazides
  - structure-activity relationships, 273-74
- 6-Thioguanine
  - in carcinogen testing, 400
- Thiopental
  - interaction with disulfiram, 587
  - and membrane action, 86
  - potency of, 84, 93
- THIP
  - as GABA agonist
  - and receptor adaptation studies, 368
- Threo-3-hydroxyaspartate
  - and amino acid transmitters, 169
- Thromboxane A<sub>2</sub> (TxA<sub>2</sub>)
  - and prostaglandin studies, 479, 481, 484-87, 498, 502-3
- Thromboxanes
  - and hypersensitivity studies, 74
  - and prostaglandins, 479-503
- Thymidine kinase
  - in carcinogen testing, 400
- Thyrotoxicosis
  - and receptor adaptations, 365
- Thyrotropin-releasing hormone (TRH)
  - and amino acid transmitters, 176
  - and neurotransmitter regulation, 302, 304-7, 309, 313
  - and pseudohypoparathyroidism, 259-60
- Thyrotropin stimulating hormone (TSH)
  - in immunoassay studies, 124
  - and neurotransmitter regulation, 302, 304-5, 309, 313-14
  - and prostaglandin action, 481
  - in pseudohypoparathyroidism, 259-60
- Thyroxine
  - and P-450 induction, 435, 438
  - and release of TSH, 304
- Ticrynafene (Tienilic acid, SKF 62698, ANP 3624)
  - structure-activity relationships, 268-70, 272-80 283-85
- Tityustoxin
  - and excitatory amino acid release, 171
- Toad venom
  - early studies of, 3-4
- Tobacco smoke
  - as carcinogen, 133, 141, 146, 153, 157-58

## 662 SUBJECT INDEX

- see also Smoking  
 TOCP (Tri-o-tolyl phosphate)  
 and delayed neurotoxicity,  
 512-18, 520-21  
 Tolbutamide  
 interaction with disulfiram,  
 587-88  
 Tolerance  
 and addiction  
 to barbiturates, 92-103  
 and receptor adaptations,  
 357-58  
 Toxicology  
 recent reviews, 611  
 Toxic Substances Control Act  
 (TOSCA)  
 and teratology screening, 419  
 Transderm  
 see Scopolamine  
 Tranlycypromine  
 and vasoconstriction, 472  
 Trazodone  
 and receptor adaptations, 363  
 Triaryl phosphate esters  
 and delayed neurotoxicity  
 tests, 533-37  
 Trichlorphon  
 and delayed neurotoxicity,  
 513-14  
 Tricyclic antidepressants  
 effects on receptor binding,  
 359-63, 373  
 in migraine treatment, 464  
 and presynaptic receptors,  
 609  
 Tridihexethyl  
 absorption of, 38  
 Trifluridine  
 [2'-deoxy-5-(trifluoromethyl)  
 uridine, Viroptic]  
 in keratoconjunctivitis  
 treatment, 600-1  
 Triglyceride lipase  
 and prostaglandin  
 biosynthesis, 482  
 Triiodothyronine  
 and release of TSH, 304  
 Trimethylamine  
 and drug metabolism, 54  
 2,4,6-Trioxohexahydropyri-  
 midine  
 and CNS effects of  
 barbiturates, 91  
 Tryptophan  
 and hypothalamic hormone  
 release, 308, 310, 314  
 L-Tryptophan  
 in migraine action, 468, 470  
 Tryptophan hydroxylase  
 in migraine action, 468, 470  
 Tuberculosis  
 in lung cancer studies, 140  
 Tubocurarine  
 absorption of, 37  
 Tyrosine hydroxylase  
 in Alzheimer's disease, 329  
 and disulfiram action, 581,  
 584  
 and metyrosine, 598  
 and nerve growth factor  
 studies, 208-13, 215-16,  
 218, 221-22  
 and receptor adaptation  
 studies, 368
- ### U
- UDP glucuronosyltransferases  
 and P-450 induction, 433,  
 444-45, 453  
 Urate  
 renal excretion of  
 drug effects on, 277-79  
 Uricosuric activity  
 relationship of POA acid  
 structure to, 277-80
- ### V
- Vansil  
 see Oxammiquine  
 Vasoactive intestinal peptide  
 and hypothalamic hormone  
 release, 307  
 as neuropeptide, 606  
 Vasoconstriction  
 and dilation  
 in migraine attack, 464-66,  
 471  
 Vasodilator  
 minoxidil as, 603-4  
 Vasopressin  
 and memory studies, 333,  
 336-37, 345-47  
 as presynaptic receptor, 12  
 and prostaglandin action, 481  
 Veratrine  
 and excitatory amino acid  
 release, 171  
 Veronal (Barbital)  
 and addiction, 92  
 Verucologen  
 and excitatory amino acids,  
 171
- Vidarabine  
 in keratitis treatment, 600  
 Vinblastine  
 and nerve growth factor  
 studies, 221  
 Vincristine  
 in treating acute lymphocytic  
 leukemia, 232, 239  
 Viroptic  
 see Trifluridine  
 Vitamin A  
 role in lung cancer  
 susceptibility, 138-40  
 Vitamin D  
 in treating pseudohypo-  
 parathyroidism, 261  
 Vitamin K  
 interaction with disulfiram,  
 587  
 Vitamins  
 buccal absorption of, 43  
 transport mechanisms for, 33  
 VM-26  
 in treatment of childhood  
 ALL, 239
- ### W
- Warfarin  
 interaction with disulfiram,  
 587
- ### X
- Xanthine oxidase  
 and disulfiram inhibition, 580  
 renal aspects of, 279  
 Xanthurenic acid  
 in disulfiram neuropathies,  
 585  
 Xenobiotics  
 and P-450 induction, 431-54
- ### Y
- Yohimbine  
 and receptor adaptations, 360  
 Yutopar  
 see Ritodrine
- ### Z
- Zone electrophoresis  
 and teratology screening, 434  
 Zoxazolamine  
 and P-450 induction, 444,  
 453

